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Annual Review

1992



**Annual Review
of the
National
Transportation
Agency of Canada
1992**

Annual Review
of the
National
Transportation
Agency of Canada
1992

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TABLE OF CONTENTS

SUMMARY AND CONCLUSIONS	i
INTRODUCTION	1
CANADA'S ECONOMY IN 1992	5
AIR SERVICES	13
• Highlights of 1992	13
• Industry Structure	14
• Industry Operations	27
• Concentration and Competition	42
• Financial Performance	47
• Government Initiatives	50
• Northern and Remote Areas	52
RAIL SERVICES	57
• Highlights of 1992	57
• Industry Structure and Operations	58
• Traffic	62
• Competition	73
• Service	84
• Carrier Performance	86
• Network Rationalization	88
• Royal Commission on National Passenger Transportation	90
• National Transportation Act Review Commission	91
• Rail Passenger Matters Dealt with by the Agency	93
TRUCKING SERVICES	95
• Highlights of 1992	95
• Trucking in the Canadian Transportation Industry	96
• Government Initiatives Affecting Trucking	96
• Industry Structure	104
• Competition	108
• Traffic and Rates	115
• Trucking Operations	120
• Carrier Performance	125
• Royal Commission on National Passenger Transportation ...	126
• National Transportation Act Review Commission Evaluation of the <i>MVTA, 1987</i>	127

MARINE SERVICES	129
CANADIAN INTERNATIONAL LINER TRADE	129
• Highlights of 1992	129
• Significance of International Liner Trade	130
• Level of Service	131
• Users' Perceptions of Liner Service Levels	136
• Ocean Freight Rates in Liner Trade	137
THE SHIPPING CONFERENCES EXEMPTION ACT, 1987 ...	139
• Highlights of 1992	139
• Industry Structure	140
• Effectiveness of <i>SCEA</i>	140
• Perspectives on <i>SCEA</i>	142
• National Transportation Act Review Commission Evaluates <i>SCEA</i>	145
NORTHERN MARINE RESUPPLY	149
• Highlights of 1992	149
• Number of Carriers and Levels of Service	150
• Traffic and Tariffs	150
• Users' Perspective on 1992 Shipping Season	151
• Agency Activities in 1992	153
• National Transportation Act Review Commission Revisits Part V	154
INTERMODAL SERVICES	155
SAFETY	169
EMPLOYMENT	175
ACCESSIBLE TRANSPORT SERVICES	181
APPENDICES	187

SUMMARY AND CONCLUSIONS

Transportation plays a key role not only in the development of domestic economies but also in promoting exchanges with other countries, thereby facilitating international economic relations. Among the various internal and external factors driving the development of transportation activities, economic growth is most prominent; however, such economic growth is not possible without a safe, reliable and competitive transportation system.

For a country the size of Canada, transportation is vital. Its strategic importance for national competitiveness, and for the economy as a whole, continues to increase with the growing economic integration in North America and the world. Canada's trading activity must continue to grow to maintain the country's standard of living.

Challenges

The continuing globalization of markets offers many benefits in terms of goods and services, but it has also created more interdependence and competition. Economic integration has been accompanied by production strategies that take maximum advantage of higher value-added opportunities, regardless of national borders. For transportation, these developments strongly favour transport firms that can move people or products worldwide through extensive global networks as well as covering domestic markets.

The lingering recession has also had an impact on the levels of demand for transportation services. Given the high sensitivity of transport demand to the general level of economic activity, 1992 showed that relatively small differences in overall economic growth have considerable impact not only on the level and composition of demand, but also on its price sensitivity. Lower levels of demand had the effect of shrinking revenues and intensifying competitive pressures in the marketplace. Depressed traffic levels and lack of any significant new business forced carriers to try to divert business away from rival carriers, creating a harsher competitive climate in the industry.

"This is the era of the global economy. Changes around the world have an enormous impact on us."

Ron E. Lawless

Transportation users in Canada were no less demanding in 1992. Shippers continued to struggle for improved competitiveness in the global marketplace and transportation, as an integral part of the production process, felt the pressures. For carriers, this limited the possibilities of increasing revenues through price action, and fare/rate increases, if any, were not sufficient to improve carriers' yield and financial results. Survey results confirmed a continuing emphasis on transit time, dependability, customized service for just-in-time delivery and, last but not least, rate competitiveness. Canadian shippers and travellers also indicated their desire to retain "freedom of choice on routings".

The most significant developments affecting Canadian carriers continued to be the growing economic integration in North America and the increased inter- and intra-modal competition.

Industry response

The year 1992 was one of severe upheaval for the transportation industry in general. In the face of an increasingly interdependent world and intense competitive pressures, both carriers and shippers are moving away from the old ways of doing business. Globalization is a fact, and transportation, like all other industries governed by the rules of the market place, is adapting to this reality. As one carrier representative states, "...there is no end in sight to the long and arduous path of adjustment."

Carriers from all transport sectors introduced such adjustment in the form of cost cutting, restructuring and downsizing measures. In many cases, cost-saving measures meant reduction in the number of employees. And while such cutbacks were painful for those laid off, it was recognized that these adjustments were the price to be paid to keep the employer viable and restore its financial health. This difficult process has not translated into a deterioration of management-labour relations nor in the safety performance of carriers. The cooperative spirit of labour unions was acknowledged by management representatives in the industry.

Carriers continued to look for ways to exploit transportation equipment and infrastructure more effectively with the objectives of lowering costs, improving service and enhancing competitiveness. Most cost-cutting programs, however, do not generate immediate results, but are designed to produce, in the long run, improvements to a carrier's financial position.

The significant restructuring of the transport industry observed in 1992 was a continuation of previous years' initiatives, taking the form of retrenchments, expansions, consolidations, mergers, corporate alliances and agreements. Canadian carriers continued their search for alliances with high-quality partners to enhance their presence in the marketplace. Initiatives implemented in 1992 indicate a tendency towards a partnership approach, with carriers from different modes (or even from the same mode) working together for the benefit of Canadian industries (e.g., CN/J.B. Hunt, Advantage Canada). Seamless transportation is an increasingly important objective in these decisions.

But carriers also looked at strategic alliances to improve the reach of their services and to deal with other marketplace realities. Expanded service networks enable carriers to offset the costs of local price wars with profits generated in markets with less competition; they can also restrain cost expansion through economies of scale and of scope.

"The trucking business is changing, we're trying to change with it and we're all going to work a lot harder for a lot less."

Johnnie B. Hunt,
Chairman of J.B. Hunt Transport Services

Structural changes raised some competition policy issues, as observed in the Competition Tribunal's hearing of the Gemini case. One result of this has been that the contestability of transport markets has been pushed to the forefront of competition policy matters.

Changes in transport activities continued to be very unevenly spread within and between modes of transport. Some operational decisions made in 1992, in air transportation for instance, showed that carriers recognized a certain degree of saturation in some markets.

Regulatory policy

"To remain competitive, shippers need improved service from their Canadian carriers, but they also require freedom of choice to select the best routes for their traffic."

Maria Rehner, President CITL

During 1992, the National Transportation Act Review Commission consulted widely with interested parties in its review of the legislation reforms introduced in 1988. This Commission, together with the earlier Royal Commission on National Passenger Transportation, have presented the Minister with findings and recommendations that have important policy implications. Given the complex interaction of the transport industry with so many other economic activities, and its strategic importance for competitiveness, there is a need to understand the economic implications of all changes affecting the industry and to focus attention on the real problems confronting it. The financial situation of many carriers is precarious and the challenge is to determine the economic and regulatory environment best suited for the successful restructuring of the industry. The formulation of "domestic" measures, however, has to take into account their international implications and complement the approaches used at the international level. Policy responses have to provide a solid foundation for the future development of the industry.

Royal Commission on National Passenger Transportation

On November 19, 1992, the Royal Commission on National Passenger Transportation issued its final report on Canada's intercity passenger transportation needs over the next 30 years. The report called for the phased withdrawal of government transportation subsidies, the application of a "user-pay" concept, and the restriction of the government's role to that of a referee. It stated that for existing services, every cost, including environmental damage, insurance fees and safety features, should be reflected in passenger ticket prices. The Commission made other specific recommendations with respect to airline, automobile, train, bus and ferry travel, as well as to travellers with disabilities, construction and maintenance of highway infrastructure, and payment for environmental damage.

National Transportation Act Review Commission

The NTA Review Commission completed its statutory review of the five-year old package of legislative reforms and submitted its report to the Minister on January 31, 1993. The Commission had conducted numerous hearings and other consultations in the course of its review, and had studied over 150 submissions from shippers, carriers, governments, labour groups, port authorities and other interested parties. Its report contained a comprehensive list of 56 recommendations, affecting all modes of transport, and grouped under the following headings:

- . Impacts on shippers and travellers;
- . Safety, environment and labour-management relations ;
- . The carriers;
- . Keeping competition alive;
- . Transportation policy and the role of government;
- . The legislation and the Agency.

INTRODUCTION

Annual Reviews

One of the key policy instruments to sustain growth has been and continues to be that of making governments more efficient. The improvement of government efficiency has centred around two main initiatives - deregulation and privatization, both of which have been applied to the transportation sector. Air Canada was privatized and a reform of the economic regulatory framework for transportation was implemented. Transportation regulatory reform was achieved through legislative action and is contained in the *National Transportation Act, 1987 (NTA, 1987)*, the *Motor Vehicle Transportation Act, 1987 (MVTA, 1987)*, and the *Shipping Conferences Exemption Act, 1987 (SCEA, 1987)*. An overview of economic regulatory reforms is presented in Appendix A.

The major reforms to transportation legislation introduced in 1988 were designed primarily to reduce regulation and to promote a more dynamic and competitive environment for transportation services through a greater reliance on market forces. Among other things, the new Act required that the National Transportation Agency (Agency) prepare four Annual Reviews, from 1988 through 1991, on the outcome of the revised transportation legislation in Canada. The Reviews were submitted to the Minister of Transport, tabled in Parliament, and thereby made public. The Agency's four Annual Reviews were followed by a Comprehensive Review, carried out in 1992 by a panel of Governor-in-Council appointees, to assess the overall impact of the legislation on Canadian transportation and to recommend any changes considered necessary.

Before the expiry of the original statutory review mandate, i.e., the publication of the fourth Annual Review, the Minister requested that the Agency continue its review function for at least two more years, pending the outcome of the 1992 Comprehensive Review.

One specific recommendation of the National Transportation Act Review Commission (NTARC) was:

"...that the Agency continue to prepare annual reviews after 1993, with revisions to their scope reflecting current stakeholder concerns."

Agency's Annual Reviews

Mandate

The *National Transportation Act, 1987* was specific in what the Agency was to cover in its Annual Reviews:

- changes in prices and level of services offered to shippers and travellers;
- changes in structure, performance and employment levels in the transportation industry;
- the effect of competitive line rates on railway companies;
- abandonment of railway lines; and
- other matters that the Minister may refer to the Agency's attention.

Review Process

The Agency's 1992 Annual Review is the fifth in a series. Numerous existing data sources and established Agency monitoring tools have been utilized to provide information on both the supply and demand side of transportation services in Canada. The review process is based on four primary sources of information:

- institutional data
- the Agency's Survey Program
- consultations
- interested parties' submissions

Appendix B.1 lists the various government departments and agencies which provided the Agency with information for use in its Annual Review. Appendix B.2 presents details on the Agency's 1992 survey program. The different surveys are listed and the associations which supported the survey program are identified. Appendix B.3 presents detailed results regarding response rates and regional coverage of the Agency's surveys. Sources for figures and tables presented in the text are reported in Appendix B.4.

Scope

This review, like its four predecessors, covers all transportation modes under federal government jurisdiction and all matters mandated by the

Act, with respect to the transportation regulatory reform legislation. The 1992 Annual Review is not a policy document; however, information presented may prove useful to policy makers.

The basic thrust of the Review is aimed at identifying changes which have taken place in prices, services, and competition within the domestic transportation industry. Furthermore, the Review assesses the impact on the structure and performance of the transportation industry and its users. While the main aim of the Review is to study domestic issues, where appropriate and possible, the focus has been broadened to incorporate corresponding developments in transborder and other international transportation. The undeniable trend toward North Americanization, not to mention globalization of economic activities, dictates the adoption of a more comprehensive analysis. Unfortunately the analysis of the source, nature and level of competition influencing Canadian carriers' conduct and performance was constrained by data availability.

Since the performance of the economy affects the aggregate demand for transportation services, a section is devoted to the Canadian economy. The economy section places the transportation industry's performance into the broader context of the overall environment under which business was conducted last year. The Review also includes four modal sections on air, rail, trucking and marine, and a section on intermodal services. Finally, safety, employment and accessible transportation services are examined.

Recommendations issued by the Royal Commission on National Passenger Transportation and the National Transportation Act Review Commission may have considerable impact on transportation in Canada. References are made to these recommendations at appropriate points throughout this Review.

CANADA'S ECONOMY IN 1992

Highlights of 1992

Economic Activity

The Canadian economy inched ahead in 1992 but its performance was mainly influenced by fiscal retrenchment, industrial restructuring, domestic spending weaknesses and soft commodity markets.

Inflation

The deep recession has held annual increases in consumer prices to less than two per cent -- the lowest level in over twenty years.

Employment

Employment continued to decline as firms cut costs and boosted productivity to restore profitability. Wage settlements moderated, bringing unit labour costs down.

Canadian Dollar

The Canadian dollar recovered slightly in the first few months of the year then dropped sharply to a low of \$0.77 U.S. in November. The decline boosted export sales and improved domestic retail sales through reductions in cross-border shopping.

Monetary Conditions

The tenacity of the recession and the absence of inflation brought about lower interest rates, although these rates remained substantially above U.S. levels due to Canada's massive borrowing abroad.

Transportation and the Economy

Demand for freight and passenger transport services is derived from the overall economic conditions prevailing in the economy. This section of the review presents an overview of the performance of the Canadian economy in 1992 to help explain the challenges faced during the course of the year by Canadian transport firms. The individual sectors that generate demand for transport services faced different economic pressures, and together, these created the overall environment in which the transport industry operated.

Economic Growth

In recent years, the government has implemented new public policies to make the Canadian economy work better. Among the changes introduced, the following have been particularly supportive of growth driven by the private sector:

- deregulation of important industries, such as financial services, telecommunications, transportation, energy;
- privatization of government-controlled companies;
- adoption of a firm anti-inflationary monetary policy; and
- implementation of the Canada-U.S. free trade agreement.

In 1992, the Canadian economy showed signs of strengthening. Modest growth was reported in each quarter of the year, with healthy increases observed in consumption, investment and exports. While the economy showed signs of an economic recovery, its momentum in Canada was less than in the U.S. and, at year end, output was still below pre-recession levels.

Sectoral Overview

Despite evidence that Canadian economic activities have begun to stabilize, many regions and sectors still face severe strains. The environment of uncertain job prospects and weak income growth has translated into households focusing on containing or reducing record debt loads.

The competitive pressures faced by Canadian businesses in recent years have resulted in severe shrinkage of profits and imposed significant restructuring of operations. At the same time, there has been retrenchment in government spending. Competitive pressures on domestic firms were eased somewhat in 1992 by the depreciation of the Canadian dollar, but the structural and balance sheet adjustments made

by both the public and private sectors have prolonged the downturn and acted as an impediment to recovery.

Canadian firms continued to cut costs and boost productivity to restore their profitability, resulting in a decline in employment in 1992. However, Canadian manufacturing output revived with improved competitiveness and the 10 cent drop in the Canadian currency vis-à-vis the U.S. dollar. Moderate wage settlements allowed unit labour cost reductions.

Canadian and U.S. car sales fell again in 1992, hitting a nine-year low for Canada; however, light truck and van purchases increased, lifting Canadian motor vehicle output to a new record.

Canadian steel producers have started to recapture some of the domestic market share lost due to currency appreciation in the late 1980s and a strike in 1991.

The chemical industry showed signs of recovery in 1992, with operating profits rising by some 60 per cent. Specialty chemical producers started to benefit from restructuring initiated in recent years.

Forest products firms reported another year of widespread losses in 1992. The improvement in lumber and panelboard prices, alongside tightening lumber supplies in the U.S. Pacific northwest and a moderate recovery in North American housing starts, enabled some B.C. wood products firms to return to profitability. But weak newsprint prices and softer pulp markets continued to depress companies' financial results.

The market for metals was weak and, by December, 1992, most base metals were trading at prices near the lows reached in 1991.

In 1992, crude oil prices averaged one dollar less per barrel than a year earlier. Natural gas markets improved, with higher U.S. spot prices as a result of inventory replenishment, substantial increases in cogeneration and gas-fired electricity demand, and production curtailments in the wake of Hurricane Andrew. Exploration and development fell to a twenty-year low in 1992.

Widespread restructuring was undertaken in service industries, largely as a result of weak consumer spending. The transport sector addressed its excess capacity situation through significant downsizing and numerous government cutbacks were applied in response to fiscal pressures.

Residential real estate activity faltered in 1992 after the previous year's gains. An extensive oversupply of office space in most metropolitan areas kept commercial construction at a low ebb. The telecommunications equipment industry continued to make major inroads in export markets, mainly in wide-area networking services.

Business capital spending faced a third consecutive year of decline. Despite lower mortgage rates, weak householder confidence held back housing starts to a level barely above the extreme lows of 1991.

In 1992, sales managed to outpace inflation for the first time in three years. Yet Canadian household debt continued to rise faster than income, due to job losses, wage restraints, tax increases and rising costs of government services. As a result, competitive pressures on retail margins remained intense. Retailers received some relief from the 10 cent drop in the Canadian-U.S. exchange rate, reducing cross-border shopping.

Trade

The big drop in the Canadian dollar in 1992 brightened prospects for exporters, improved competitiveness and provided bottom-line relief. Combined with the recovery of the U.S. economy, it translated into double-digit gains in Canadian export revenues. Although export performance was partly offset by rising imports, it remained the strongest contributing factor in Canada's economic growth in 1992 (Figure 2.1).

Export gains were observed in light trucks and vans, widening the motor vehicle trade surplus. Natural gas receipts increased due to firmer prices and the opening of the Iroquois pipeline to the northeast U.S. Stronger lumber prices and the 10 cent decline in the Canada-U.S. exchange rate resulted in higher forest product earnings.

FIGURE 2.1
Real Merchandise Exports

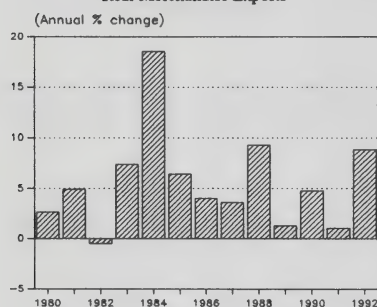
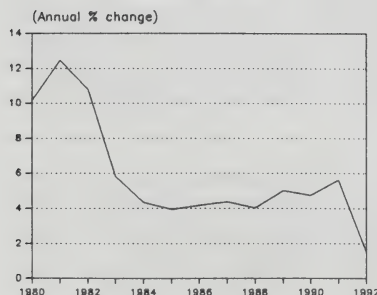


FIGURE 2.2
Consumer Price Index



Inflation

The recession has held consumer price increases below two per cent (Figure 2.2), the lowest level in over 20 years and lower than in all other G7 countries. The residual inflation has been associated with tax increases and the rising cost of government services, for example, property taxes, public transit charges and utility costs.

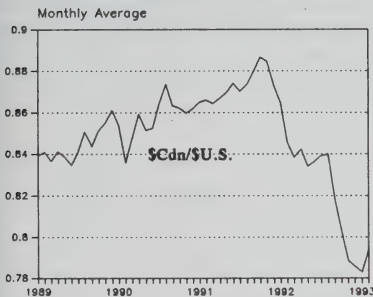
Wage settlements in Canada have been sharply curtailed under the weight of government restraint and severe cost-cutting initiatives in the private sector. On average, collective bargaining agreements signed in 1992 contained annual wage increases in the two per cent range.

Consumer prices increased by more than the national average only in the buoyant Vancouver economy and in Québec. In areas particularly hard-hit by the recession, inflation was virtually non-existent. The combination of weak domestic demand, pervasive excess capacity and intense competition has not only controlled inflation in Canada, but has also prevented it from being imported.

Currency

FIGURE 2.3

Canadian Dollar in U.S. Funds



1992 was a year of great turbulence in the currency market. Britain and Italy withdrew from the European Exchange Rate Mechanism. Spain, Portugal, Sweden and Finland devalued their exchange rates while the French franc was under considerable pressure. Europe's strongest currency, the Deutschmark, fell significantly against the U.S. dollar in the fourth quarter. The Japanese yen soared to a record high against the U.S. dollar and appreciated vis-à-vis the European currencies. The Canadian dollar was caught in this turmoil, plunging rapidly between September and December. (Figure 2.3) The pressures on the Canadian currency resulted from a deteriorating fiscal performance, soft domestic economic conditions and high-profile credit downgradings. The dollar's slide had the effect of smothering domestic cost pressures, which offered some relief from the profit squeeze affecting most producers.

Regional Economies

Newfoundland's economic performance was the weakest in the country. For the second year in a row, the province faced significant job losses. A two-year moratorium on the northern cod fishery, further reductions in groundfish quotas, provincial government retrenchment and personal tax increases all combined to weaken confidence and commercial activity. The province's mining operations have been dampened by weak international demand and soft commodity markets, and Gulf Canada announced its withdrawal from the Hibernia project.

Prince Edward Island continued to feel the adverse effects of the PVY-n potato virus. Improved lobster prices helped the fishery sector, despite U.S. restrictions on small live lobster imports. The province's economy was also aided by the construction of a GST-processing centre and Agriculture Canada's animal pathology lab.

Nova Scotia experienced a difficult year in 1992: the Westray Coal mine disaster, the closure of the East Kentville tin mine and lingering softness in commodity markets. Nova Scotia's economy also faced challenging conditions in the fishery and resource sector but was helped by the depreciation of the dollar. Small businesses received a boost in 1992 through a 50 per cent reduction in their provincial corporate income tax rate.

New Brunswick was Atlantic Canada's province with the best performance in 1992, recording the second highest employment gain in the country. The forest products industry benefitted from the slow recovery in eastern U.S. newsprint prices and stronger North American lumber prices. Employment returned to pre-recession levels and manufacturing showed signs of recovery, especially in the paper and food industries.

Québec's recovery was much weaker than expected. Provincial exports reflected increased production of motor vehicles and aluminum. Mining was constrained by weak commodity markets while firmer newsprint prices and rising U.S. demand helped Québec's newsprint producers. Housing starts fell for the fifth consecutive year in Québec, a situation attributed to out-migration, political uncertainty and rising taxes, notably the broadening of the provincial sales tax as of July to cover new housing.

Ontario was still confronted in 1992 with widespread industry rationalization which reduced overall employment in manufacturing. There were weaknesses in commercial and industrial construction, and household income was impacted by compressed wage settlements, tax increases and the rising costs of government services. The province's finances were also squeezed by the recession.

Manitoba was the only prairie province recording higher output in 1992. The province's mining sector faced weak G7 stainless steel consumption and plunging nickel prices. A contract cancellation by Ontario Hydro curtailed work on the Conawapa hydro-generating station, and the forest industry recorded its third consecutive year of contraction. However, manufacturing shipments took a sharp rise in the second and third quarters and the resale housing market closed the year with the second highest sales growth in the country. Employment was down as businesses continued to trim their employee base.

In Saskatchewan, a reduced domestic harvest of higher wheat grades and credit arrears from the former Soviet Union resulted in lower wheat export volumes. Residential construction increased, aided by the relocation of Crown Life Insurance and the Farm Credit Corporation to Regina.

Alberta experienced a 20 per cent decline in oil drilling activities in 1992. The energy sector was under intense pressure. Layoffs had the effect of dampening consumer confidence. Yet, new housing starts rose significantly, with consumers responding to improved affordability. Calgary had the highest office vacancy rates in Canada.

British Columbia recorded the strongest provincial growth in 1992 but also had the highest inflation rate of any provincial economy, largely as a result of dramatically higher housing costs. Housing and consumer spending have been boosted by large numbers of people moving to the province. The forestry sector showed signs of improvement, mostly as a result of better lumber and pulp prices. Exports of lumber and other building materials were supported by the strengthened U.S. economy. The tourist industry also had a good year, benefitting from the lower Canadian dollar. Labour disruptions at coal mines, however, reduced output and mineral fuels output declined.

International Economic Environment

The Canadian economy depends heavily on trade activities: one out of every four jobs depends on exports.

In 1992, domestic demand grew marginally in Canada, and the dawning revival of the U.S. economy sparked higher Canadian export sales. But overseas, growth among other trading partners slowed to a crawl. The United Kingdom was locked in a recession and faced low interest rates and currency depreciation. Germany slipped into recession as a result of persistent tight monetary policy and the revaluation of the Deutschemark. France and Italy were adversely affected by higher borrowing costs and weakened German demand. In Japan, industrial output and investment declined, resulting in the worst slump of the past twenty years. Wage and price inflation has been effectively curbed in most countries.

This quick overview of the domestic and international economic environment gives an indication of the pressures placed on the Canadian transportation system in 1992.

AIR SERVICES

Highlights of 1992

Airlines Struggle to Survive

The lingering recession slowed recovery in airline traffic levels, and the continuing battle for market share between Air Canada and Canadian Airlines International (Canadi*n) drained the competitors at a combined rate reaching \$1.5 million a day. Their total 1992 losses, including non-operating charges, neared \$1 billion, with Canadi*n driven to the brink of bankruptcy.

Alliances with U.S. Mega-Carriers

A proposed Air Canada-Canadi*n merger failed to materialize; instead, the two airlines sought alliances with U.S. mega-carriers - Canadi*n with American Airlines, and Air Canada with both United Airlines and Continental Airlines.

Independents

Nationair, the largest jet charter carrier, introduced low-priced scheduled services on the busiest route in the country.

Fares

Excess capacity, together with depressed travel markets, forced carriers into extensive use of fare discounting. Nationair's low fares approached those of VIA Rail and intercity bus services. Canadi*n and Air Canada implemented a five per cent general fare increase in December, the first since 1990.

Government Initiatives

The NTA Review Commission issued recommendations that may have important effects on the future development of the airline industry in Canada; the Royal Commission on National Passenger Transportation issued its report promoting a "user-pay" concept; Transport Canada announced significant new airport improvements; "Open Skies" talks with the U.S. adjourned pending installation of the new Clinton administration.

Industry Structure

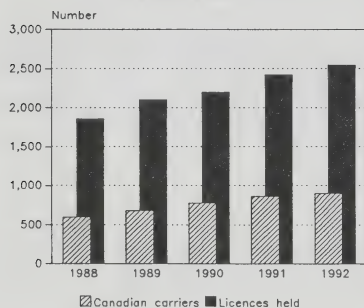
Carriers and Licences

Carriers

The number of domestic and foreign air carriers serving Canada increased again in 1992.

During 1992, the Agency issued licences to 54 new domestic carriers, authorizing them to provide services in southern Canada; another 48 domestic carriers were licensed to operate to, from, or within northern Canada (which also allows them to operate in the southern sector). Three new Canadian carriers received licences to operate international scheduled air services, and 19 new Canadian carriers were authorized to operate international charters to or from Canada. By the end of 1992, there were 898 licensed domestic carriers, compared with 861 at the end of 1991.

FIGURE 3.1
Canadian Carriers and
Licences Held



There were five proposed acquisitions in 1992, the most notable being Air Canada's and PWA Corp.'s aborted attempt to put themselves under the common equity ownership of a jointly-owned holding company, Airline Holdco. Also, a total of 11 bankruptcies were reported among air transport and related industries, with net liabilities amounting to about \$3.5 million. There were 83 requests to cancel licence authorities.

At the end of 1992, 896 foreign air carriers provided service to and from Canada. This is 27 more than at the end of 1991. The majority (798) were U.S.-based air carriers.

Licences

Table 3.1 shows the distribution of air transport licences issued by the Agency.

TABLE 3.1

Air Transport Licences: December 31, 1991 and 1992

	1991	1992
I. Domestic Licences		
Southern Canada	868	894
Northern Canada	1,009	1,092
Total Domestic Licences	1,877	1,986
II. International Licences		
Held by Canadian Carriers	553	563
Held by Foreign Carriers	1,087	1,146
Total International Licences	1,640	1,709
Total	3,517	3,695

The number of licences held by domestic and foreign carriers increased from 1991.

Majors and Affiliates

Majors

As the recession held traffic levels down through 1992, Air Canada and Canadi*n continued their costly battle for market share, racking up operating losses at a combined rate of \$1.5 million a day. Both airlines sold surplus or "non-core" assets and scoured their operations for cost-cutting opportunities, but more importantly, sought to enter new alliances with U.S. and other international carriers which may well shape the future of Canada's airline industry.

Canadian Airlines International

After announcing a loss of over \$160 million for 1991, PWA Corp. disclosed its intention to negotiate an alliance with American Airlines, the Dallas-based mega-carrier. When these talks collapsed in July, PWA and Air Canada initiated discussions on the possibilities of a merger. A plan by Canadi*n employees to revive the deal with American through wage concessions and government loan guarantees was rejected, and in October, PWA Corp. and Air Canada signed a pre-merger agreement. But this agreement failed to receive approval by Air Canada's board of directors, and PWA Corp. subsequently returned to its negotiations with American. By the end of November, PWA Corp.'s cash reserves were nearly exhausted, but the company continued to operate on the strength of \$50 million in federal government loan guarantees. It also temporarily suspended payments to creditors, and obtained \$70 million in provincial government loan guarantees (Alberta and British Columbia). On December 29, an agreement with American was finally announced, subject to the approval of employees, creditors, and governments.

As well as linking Canadi*n up with one of the world's largest carriers and its extensive U.S. and international networks, the deal would provide a large infusion of equity (\$246 million) and reduce operating costs. A key component of the agreement calls for the hosting of Canadi*n's seat inventory system to be transferred from the Gemini Group to American's Sabre System. This has sparked a number of billion-dollar lawsuits among the principals involved.

During the year, Canadi*n took delivery of several new jets, but also trimmed some fleet costs and raised cash through aircraft sales and retirements. The sale and lease-back of a DC-10-30 to a Japanese investor produced \$45 million. Three A310s, originally part of the Wardair fleet, were sold to the Department of National Defence for \$223 million, including spare parts.

Canadi*n continued the restructuring of its maintenance operations, trimming some engineering jobs in an effort to improve cost-efficiency, and in 1992, won a five-year US\$24 million contract to service the

American Airlines

- the main subsidiary of AMR Corp., American also owns Sabre computer reservation system
- route network: 119 U.S. points with hubs at Dallas/Fort Worth, Chicago, Miami, Nashville, Raleigh/Durham, San Jose and San Juan; 71 international points provide broad coverage with only weakness in Pacific rim
- fleet: 672 aircraft
- employees: 102,400
- lost C\$1,130 million on revenues of C\$17.4 billion (AMR Corp.) in 1992.
- passengers: 86.0 million

*Canadi*n cut costs and sold aircraft to raise cash.*

*Canadi*n pursued an alliance with American Airlines as the best strategy for survival.*

The Gemini Case

The Gemini Group was originally formed in 1987 by Air Canada and PWA Corp. to provide both airline partners with an improved computer reservation system (CRS). A third partner, Covia Canada, joined the group in 1989. Gemini would handle the distribution of airline and other information to travel agents and provide computer services necessary to manage or "host" Air Canada's Reservec and Canadi*n's Pegasus internal reservation systems. The resulting economies of scale, together with Covia's state-of-the-art Apollo software would put Gemini on a competitive footing with its main rival, Sabre, in the Canadian market.

The potential market power of this new pan-Canadian system was recognized by the Competition Bureau, and in 1989, it issued a Consent Order, specifying a code of conduct for the operation of CRSs in Canada and requiring that Gemini provide other CRSs, specifically Sabre, with complete and equal access to last seat booking (the highest measure of external access to the hosted airlines' seat inventories) to ensure that competitors could not be kept out of the market.

Today, Gemini operates a fully-competitive CRS, providing hosting services to Air Canada, Canadi*n and several other smaller scheduled and charter airlines. It uses software customized for the Canadian market, and is linked through Apollo to the global Galileo CRS. Gemini has incorporated advanced technology in its operations, such as a unique high-speed telecommunication link that connects the various system components in Canada with the Apollo facility in Denver. The company currently controls the major portion of the travel agency reservation business in Canada (Sabre has the remainder), and employs approximately 700 people, mainly in Toronto and Winnipeg.

The proposed \$246 million investment by AMR Corp. in Canadi*n Airlines is based upon a comprehensive services agreement which, among other things, calls for the transfer of the hosting of Canadi*n's internal reservation system from Gemini to American Airlines' Sabre CRS. Gemini and the other partners, Covia and Air Canada, oppose such a transfer, citing the probable failure of Gemini due to the loss of approximately \$30-million in annual hosting fees and the probable shift of some Canadi*n-oriented travel agent subscribers to Sabre.

The Gemini debate has spawned a series of massive lawsuits, commencing with PWA Corp.'s action in August, 1992 to have Gemini declared insolvent, thereby freeing PWA Corp. from its contractual obligations. The Gemini Group responded in November with a \$1 billion suit against PWA Corp. charging it with "breach of fiduciary responsibilities as a partner in Gemini...", and added a further \$500 million claim against PWA Corp., Canadi*n and American Airlines for "unlawful interference with Gemini's economic interests." Covia subsequently launched a \$1.2 billion action against PWA Corp. and AMR Corp.

In April 1993, the Competition Tribunal dismissed an application by the Director of Competition Policy to vary its earlier Consent Order, and thereby allow for the early termination of Gemini's hosting contracts with PWA Corp. and affiliates or, alternatively, the dissolution of the Gemini partnership. As anticipated, the tribunal's decision has been appealed.

General Electric engines on four U.S. Air Force B747s that serve as airborne command posts. During 1992, there was a net decline of 1,200, or six per cent of Canadi*n's total work force, which matches the reduction effected during 1991.

An attempt to reduce capacity was only partially successful.

In response to government pressure to stem further airline losses, Canadi*n announced a five per cent general fare increase effective December 1, followed by a reduction of some 12 per cent of its domestic capacity -- expecting Air Canada to follow suit. Service cuts were effected by reducing frequencies on certain routes, withdrawing two B737s from service and down-sizing aircraft on 12 other flights. In

Air Canada entered an agreement with United Airlines and purchased a major interest in Continental Airlines.

United Airlines

- a subsidiary of UAL Corporation, United owns 50% of the Covia Group which is a one-third partner in the Gemini computer reservation system
- route network: 158 U.S. and international points with hubs in Chicago, Washington, Denver and San Francisco; United is strongly positioned in western U.S. and has broadest international coverage with trans-Atlantic, trans-Pacific, Central and South American routes
- fleet: 545 aircraft
- employees: 81,636
- lost C\$1,156 million on revenues of C\$15.6 billion (UAL Corp.) in 1992
- passengers: 66.4 million

February, 1993, however, the airline re-instituted about half of the discontinued flights, citing Air Canada's failure to match its initial reductions.

In its international operations, Canadi*n added more scheduled flights to several Asian and European points, but discontinued service to Lima, Peru.

Air Canada

Although failing in its bids to merge with rival Canadi*n or purchase its international operations, including the coveted Canada-Japan routes, Air Canada pursued its own strategy of global alliances. Efforts to finalize the terms of a 1991 agreement in principle with USAir were dropped in favour of an alliance with United Airlines Inc., the second largest U.S. carrier. Essentially, the joint marketing arrangement provides for one-stop check-ins, coordinated flight schedules, and integrated frequent flyer plans, as well as improved access for Air Canada customers to United's network of U.S. and international points. A similar arrangement with Air France, which had terminated its agreement with Canadi*n, will further improve Air Canada's international access to points in Europe, Africa, Asia and the Middle East.

In November, Air Canada acquired a major interest in Continental Airlines Inc., the fifth-largest U.S. airline. The airlines will offer coordinated flight schedules, integrated frequent flyer plans, plus combined access to some 300 Canadian, U.S. and other international destinations.

It should be noted that while these alliances offer significant advantages for the partners, they are ultimately subject to the limitations imposed by bilateral air agreements between the countries involved, and may not be used to achieve benefits such as the ability to fly routes that are not specifically authorized in existing bilaterals.

Air Canada was subsequently awarded maintenance contracts valued at \$5 million for Continental's B727s, an arrangement that offers potential for additional business, since Continental contracts out about \$250 million of maintenance work annually.

In March, 1992, Air Canada announced the sale of its money-losing enRoute credit card operation to Citibank Canada for \$282 million, freeing up both cash and computer resources. The airline's new president targeted an overall cost reduction of 10 per cent as part of a plan to improve operating income, and during the year, layoffs of more than 2,600 employees from all parts of the organization were announced -- almost 13 per cent of the company's workforce. Unprofitable freight operations were restructured and the all-cargo fleet of five DC-8s put up for sale. According to press reports, the enRoute sale, the sale and leaseback of three B747-400s and the decision to take delivery of six

Air Canada also cut costs and sold assets to raise cash.

Continental Airlines

- a subsidiary of Continental Airlines Holdings Inc., Continental had been in Chapter 11 bankruptcy protection since December, 1990
- route network: about 140 U.S. points with hubs in Houston, Newark, Denver, Cleveland and Honolulu; Continental is strong in southern and north-eastern U.S., and serves 54 international points in Europe, Central and South America, and the Pacific rim
- fleet: 328 aircraft
- employees: 42,000 (approx.)
- lost C\$157 million on revenues of C\$ 7.1 billion in 1992
- passengers: 38.4 million

Air Ontario and Air Alliance added new transborder services.

A320 aircraft on operating leases were expected to generate \$800 million. On a much smaller scale, even some passenger amenities, such as free alcoholic drinks, were cut back in the all-out effort to shave operating costs.

Despite the emphasis on cost-cutting, Air Canada introduced substantial new capacity in the spring with the deployment of three new B747-400s. In addition, two combination passenger/cargo B747-200s were converted to all-passenger configurations. Although these aircraft were assigned to international routes, there was a trickle-down effect as larger aircraft replaced smaller ones throughout Air Canada's network. In December, Air Canada announced it would trim its own capacity by three per cent, involving the elimination of about a dozen domestic flights.

Internationally, Brussels, Berlin and Lyons were added to the schedule (Brussels was discontinued in January, 1993), and transborder service between Montréal and Chicago was re-activated.

Affiliates

Actions by the affiliated carriers were largely overshadowed in 1992 by the merger and acquisition activities involving Air Canada and Canadi*n. It was clear that if the proposed merger of the parent airlines proceeded, there would be significant rationalization of operations at the feeder level. In this climate of uncertainty, together with continuing poor economic conditions, many affiliate carriers opted to retrench, while a few opened new routes, notably to U.S. points.

Air Ontario launched service from Toronto to Baltimore/Washington, complementing existing services to Hartford, Cleveland and Newark. It also negotiated a commercial agreement with norOntair covering marketing programs and coordination of schedules at Timmins, Sault Ste. Marie, Sudbury and North Bay.

Air Alliance also launched service to Newark from Québec City, in addition to its existing transborder service between Montréal and Boston.

AirBC reorganized its operations over the summer, eliminating its Twin Otters and redeploying other aircraft to fill the gaps.

Canadian Regional Airlines' planned consolidation of Time Air and Canadi*n Partner (Ontario Express and its subsidiary, Canadian Frontier) was postponed to the first quarter of 1993. It was decided not to merge Inter-Canadien into the new company in the interests of the minority shareholders.

The Search for Alliances

Air Canada/USAir

In 1991, Air Canada began talks with USAir with the goal of obtaining greater access to the U.S. market under an anticipated "Open Skies" agreement. USAir offered a strong position in the eastern U.S., and an agreement in principle was reached covering operational and marketing links as well as possible cross-ownership. By mid-1992, however, the terms of the alliance had yet to be settled, and when USAir opted to sell a 44 per cent equity stake to British Airways, Air Canada looked to other alternatives.

Air Canada/Canadi*n

Merger talks between Air Canada and Canadi*n culminated in a proposal to establish a holding company, with equal representation of both companies on the board of directors. Current stockholders of both airlines would be issued shares in the new company on a one-for-one basis. The holding company would provide policy guidance, direction and common services, but the two airlines would continue to operate separately out of their respective headquarters in Montréal and Calgary. Excess capacity and duplicate activities would be eliminated in both domestic and international operations. Although the proposal received preliminary agreement, the operating and financial plans were subsequently rejected by Air Canada's board of directors amid controversy over the huge combined debt load and projected job losses.

Air Canada/United Airlines

Effective October 25, 1992, Air Canada and United Airlines entered into a commercial agreement incorporating code-sharing and one-stop check-in between Toronto and selected U.S. cities (with the potential addition of Montréal, Calgary and other U.S. and international points). The arrangement also includes coordination of the airlines' flight schedules for convenient connections and integration of Air Canada's Aeroplan and United's Mileage Plus frequent flyer programs. Other elements of the agreement involve shared advertising and promotion, joint cargo programs and tour offerings.

Air Canada/Continental Airlines

In November, 1992, a bid by Air Canada and Air Partners L.P. (a consortium of Texas investors) to purchase a controlling interest in Continental Airlines Inc. was accepted, subject to bankruptcy court approval. Continental, the fifth largest U.S. airline, had been operating under Chapter 11 bankruptcy protection since December, 1990. The total investment was US\$450 million (approximately C\$577 million), comprised of US\$235 million from Air Canada and US\$215 million from Air Partners. Air Canada and Air Partners now control 55 per cent of Continental's equity and 65 per cent of the voting stock, and each can appoint six directors to Continental's 18-member board. The airlines will offer coordinated flight schedules and an integrated frequent flyer plan (linking Air Canada's Aeroplan with Continental's Onepass) plus combined access to some 300 Canadian, U.S. and other international destinations, including Central American, South American and trans-Pacific points.

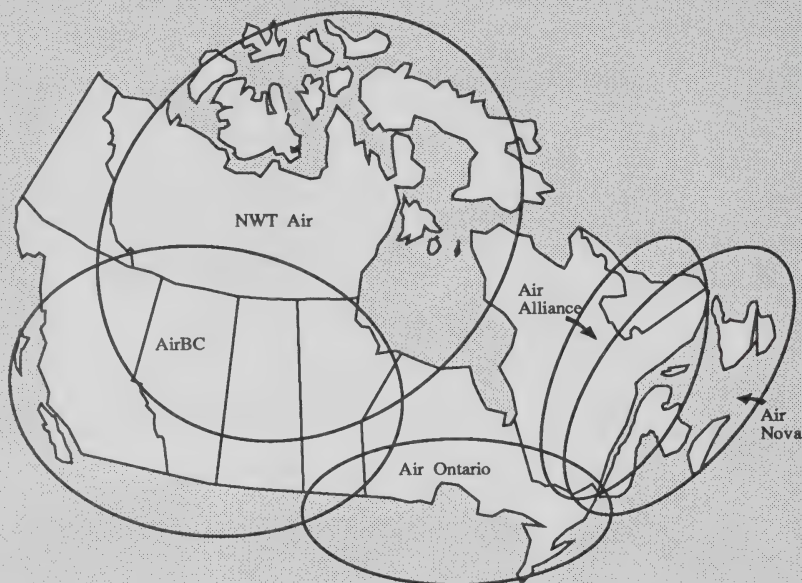
Canadi*n/American Airlines

Under the terms of a proposed acquisition agreement announced December 29, 1992, American Airlines Inc. would pay \$246 million to acquire a 33% equity holding in Canadi*n, including a 25% voting interest and two of the eight seats on Canadi*n's board of directors. American's parent company, AMR Corp., would provide a range of administrative services to Canadi*n, and the airlines' frequent flyer programs, Canadi*n Plus and AAdvantage, would be linked together early in 1993. Implementation of the agreement hinges upon three key conditions, i.e., Canadi*n must transfer the hosting of its seat inventory from the Gemini computer reservation system to American's Sabre system; Canadi*n's financial restructuring plans must be accepted by the company's unions and creditors; and regulatory approval must be obtained from both the United States and Canadian governments.

Other International Alliances

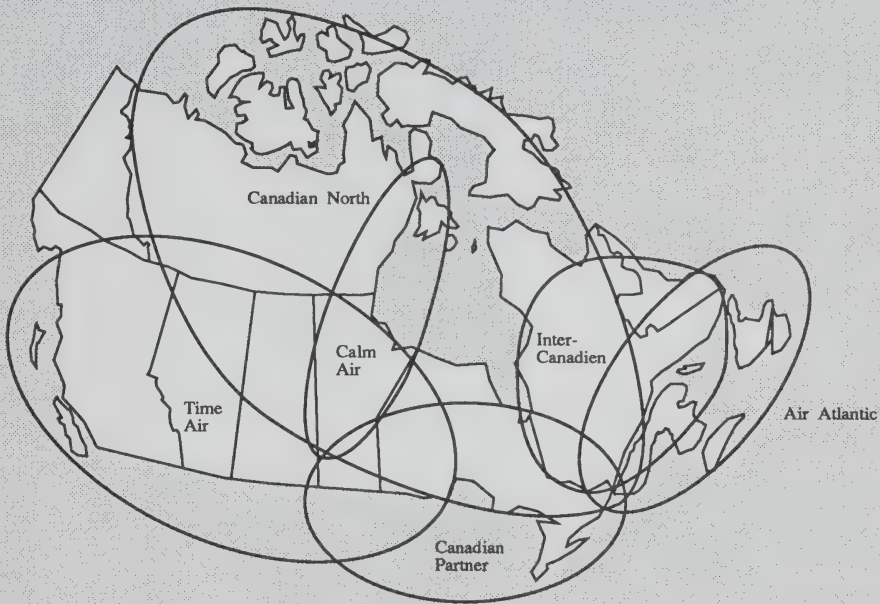
Most of the world's larger airlines have cooperative agreements with international partners, ranging from shared frequent flyer plans to joint marketing and coordinated scheduling. By the end of 1992, the globalization trend has also produced an increasing amount of cross-border ownership, including the following equity alliances: Delta Air Lines-Singapore Airlines-Swissair; KLM Royal Dutch Airlines-Northwest Airlines; British Airways-USAir Group-Quantas-Deutsche BA-TAT-Air Russia; SAS-Continental-British Midland-Linje-flyg (Sweden); Air France-Sabena-CSA (Czechoslovakia)-Euro Berlin-Swissair-Tunis Air; Alitalia-Malev (Hungary); JAL-Air New Zealand-Hawaiian Airlines-DHL International; Iberia-Aerolineas Argentinas-Viasa (Venezuela)-Ladeco (Chile); America West-Ansett International; Lufthansa-Euro Berlin-DHL International-Lauda Air-Luxair; and All Nippon Airways-Austrian Airlines.

FIGURE 3.2: Air Canada Connectors



Carrier	Network	Fleet
Air Canada	45 destinations in Canada, the U.S., Europe, and the Caribbean.	108 jets
Air Nova (100% owned by Air Canada)	17 destinations in the Atlantic provinces and Quebec; Ottawa; Boston and New York.	5 jets 10 non-jets
Air Alliance (75% owned by Air Canada; code-sharing agreement with Air Schefferville)	12 destinations in Quebec and Ontario; Boston and New York.	14 non-jets
Air Ontario (75% owned by Air Canada)	10 destinations in Ontario; Montreal and Winnipeg; Baltimore, Cleveland, Hartford, and New York.	21 non-jets
AirBC (85% owned by Air Canada; owns 50% of Pacific Coastal Airlines)	26 destinations in British Columbia, Alberta, and Saskatchewan; Winnipeg; Seattle and Portland.	5 jets 28 non-jets
NWT Air (100% owned by Air Canada; code-sharing agreements with Air Tindi, Aklak Air, Buffalo Airways, and Northwestern Air Lease)	5 destinations in the Northwest Territories; Calgary, Edmonton, and Winnipeg.	3 jets 1 non-jet

FIGURE 3.3: Canadian Partners



Carrier	Network	Fleet
Canadian Airlines International (100% owned by PWA Corporation; code-sharing agreements with Air Alma and Air St. Pierre)	38 destinations in Canada, the U.S., Mexico, South America, Europe, and Asia.	77 jets
Canadian North (a division of Canadian Airlines International)	21 destinations in the Northwest Territories, Quebec, Manitoba, and Alberta.	9 jets
Air Atlantic (45% owned by PWA Corporation)	19 destinations in the Atlantic provinces, Quebec, and Ontario; Boston.	3 jets 11 non-jets
Inter-Canadien (70% owned by Canadian Regional Airlines ¹ ; code-sharing agreement with Alexandair)	24 destinations in Quebec; Ottawa and Wabush.	12 non-jets
Canadian Partner (100% owned by Canadian Regional Airlines)	17 destinations in Ontario; Montreal and Winnipeg; Allentown, Columbus, Dayton, and Harrisburg.	19 non-jets
Calm Air (45% owned by Canadian Regional Airlines)	25 destinations in northern Manitoba and the Northwest Territories; Winnipeg.	8 non-jets
Time Air (100% owned by Canadian Regional Airlines)	33 destinations in British Columbia, the Prairie provinces, Ontario, the Northwest Territories, and Yukon; Minneapolis and Seattle.	7 jets 20 non-jets

¹ Canadian Regional Airlines Ltd. is a wholly-owned subsidiary of PWA Corporation.

Canadian Partner underwent major cutbacks.

Although its consolidation into Canadian Regional Airlines was postponed, Canadi*n Partner (Ontario Express) announced major changes in early 1993, including layoffs totalling more than half of its staff and elimination of all of the former Canadi*n Frontier and Air Toronto routes; the carrier no longer serves transborder markets. In addition during the course of the year it disposed of all of its ATR42 aircraft including several on lease to Inter-Canadien; Canadi*n Partner plans to re-introduce seven of the 44-seat aircraft and dispose of its current fleet of 19 and 30-seat planes in order to reduce operating costs per seat.

Independents

Jet Charter Carriers

The independent jet charter carriers continued to compete in domestic as well as international markets in 1992. While most stuck to their established "niches", others expanded or launched new services despite the depressed economic conditions and the uncertain outcome of the major restructuring taking place in the industry.

Nationair

40 destinations in Canada, the U.S., the Caribbean, Latin America, and Europe 18 jets

Nationair made significant additions to its fleet and commenced scheduled service between Toronto and Montréal at the height of the Air Canada-Canadi*n merger negotiations. Its new service featured low-priced fares and modern B757 aircraft. Nationair subsequently announced additional scheduled services on the Toronto-Ottawa and Toronto-Halifax route, setting off a heated market share skirmish on some of the nation's busiest and most lucrative routes. The competitive response from the major airlines dampened Nationair's ambitions (the Toronto-Halifax service was never started) and in early 1993, the challenger withdrew from the corridor. A few months later, Nationair declared bankruptcy.

Air Transat

31 destinations in Canada, the U.S., the Caribbean, Latin America, and Europe 9 jets

Groupe Transat A.T., owner of Air Transat, is a vertically-integrated travel company with interests in tour operators and travel agents as well as its charter airline. In 1992, it purchased 50 per cent of Toronto-based Regent Holidays and 50 per cent of Chieftain Tours and its subsidiaries. Groupe Transat won contracts with Sunquest away from Air Canada and after losing money in 1991, posted profits of \$1.3 million in 1992. Air Transat introduced two new B757s for its charter services, and in early 1993, raised \$19.5 million (net) from the sale of additional common shares. These proceeds will be used to refinance a number of leased aircraft and also to develop the company's marketing network in western Canada.

Canada 3000

31 destinations in Canada, the U.S., the Caribbean, Latin America, and Europe 7 jets

Canada 3000 Airlines expanded its fleet in 1992 and ran a very busy summer charter operation to Europe and within Canada. It also began charter service from western Canada to Hawaii with its B757-200ERs in November. The privately-held company is reported to have made \$1 million last year (1991) on revenues of \$350 million while the industry experienced the worst year on record. Canada 3000's

Royal Airlines

9 destinations in Canada, the
U.S., and the Caribbean 3 jets

competitive strategy combines low fares and a consistent level of service with modern, efficient aircraft operating at off-peak hours.

Royal Airlines began charter operation in April, 1992, with service to Charlottetown, Halifax, St. John's, Calgary, Edmonton, Toronto and Vancouver. The airline is a division of Conifair, a turboprop charter operation based in Montréal. Royal began service with one B727-200 and acquired two more later in the year.

Other Independents

First Air dropped services from Ottawa to Montréal (Mirabel), Goose Bay, and Boston, citing poor traffic and intense competition on the Boston route from Delta Air Lines' feeder, Business Express. First Air expressed its concern that a merger of Air Canada and Canadi*n would jeopardize its competitive position with respect to its key northern network.

Emerald Airlines announced its intention to begin four-times daily turboprop service between Toronto and Montréal; however, this did not materialize against the backdrop of a major fare war on this route among Nationair, Canadi*n and Air Canada.

Early in 1992, norOntair planned to add two more Dash 8 aircraft to its fleet and expand northern Ontario service; however, the provincially-controlled airline dropped these plans over objections from private air carriers in the region. In addition, norOntair signed a marketing agreement with Air Ontario (see Affiliates).

Alexandair, a small turboprop carrier, provided services to Inter-Canadien as a code-sharing partner on the thinner routes along Québec's lower north shore. This arrangement terminated in early 1993 when Alexandair ceased operations.

Roadair, a small Montréal-based charter carrier, began services between Montréal and Vermont, planning to serve companies with offices in Eastern Québec and the Burlington area, such as General Electric, IBM and Mitel.

Skycraft Air Transport undertook a restructuring of operations after a significant drop in business from its major customer, General Motors. Scheduled services continue from the Oshawa base to Ottawa, Montréal, Windsor and Detroit.

Bearskin Airlines expanded its network while Pem Air and Air Laurentian (part of Air Schefferville) moved into some markets vacated by Ontario Express; however, many other independent carriers have reduced services during the continuing recession.

*Smaller independents continue
to operate in "niche"
markets.*

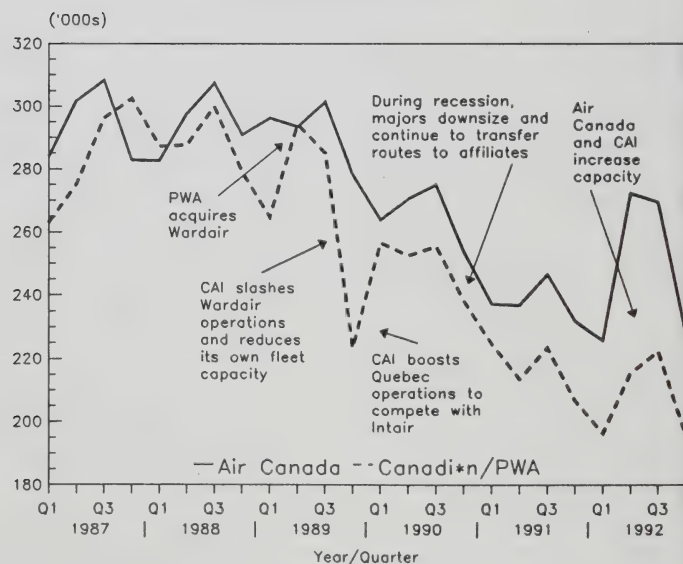
Capacity Shares

Air Canada introduced a major capacity increase in the spring of 1992.

Air Canada embarked on a major drive for market share in the spring of 1992 when it deployed three new B747-400 jumbo jets that had been parked in the desert since their initial delivery in 1991. The introduction of these 277-seat combi aircraft raised scheduled departing seats on international services in the second quarter by some 15 per cent over the corresponding period in 1991. Canadi*n also increased its international capacity in the quarter, but only by six per cent.

As long-haul aircraft replaced by the B747-400s were reassigned, the capacity surge moved into domestic operations. Air Canada's second quarter domestic capacity jumped to a level 15 per cent higher than in the second quarter of 1991, while Canadi*n's capacity exceeded the previous year by only 1.5 per cent.

FIGURE 3.4
Scheduled Departing Seats per Week,
Air Canada and Canadi*n, 1987-1992
(Domestic Southern Sector)

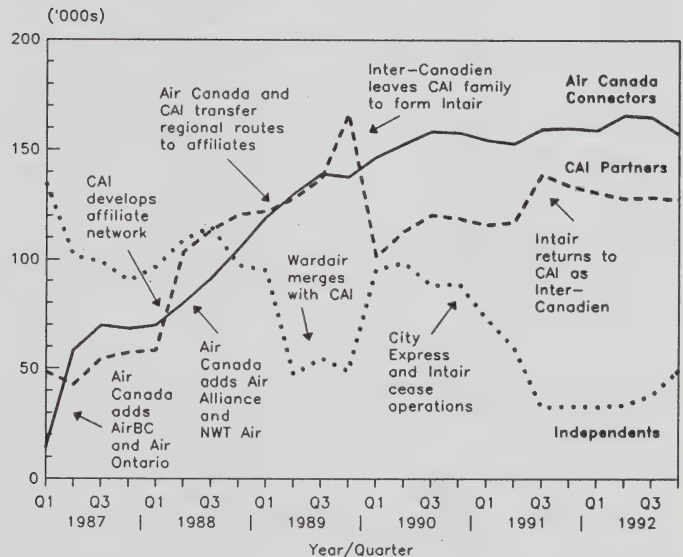


Air Canada's initiative netted a one per cent gain in its share of domestic capacity.

Air Canada's initiative earned it an immediate 2.5 point increase in its share of domestic capacity, which resulted in a one per cent shift from Canadi*n to Air Canada on a full-year basis. Air Canada achieved a 27.3 per cent share of annual domestic capacity in 1992 while Canadi*n's share fell to 26.2 per cent. Including international operations, Air Canada's share of total capacity reached 30.3 per cent in 1992; Canadi*n's proportion dropped to 26 per cent.

Air Canada's capacity increase went beyond the normal pattern of gearing up for the busy third quarter, as shown in Figure 3.4. The surge in capacity in the second quarter amounted to 20.5 per cent over the first quarter, over twice the increase for Canadi*n and far greater than Air Canada's minor adjustment in the previous spring. As a result, 1992 was the first year since 1988 that Air Canada registered an annual increase in seating capacity over a previous year, despite the fact that it was the worst year financially in the company's history and industry analysts estimated excess capacity in the domestic market to be in the 20-25 per cent range. Canadi*n held to a consistent trend of annual reduction in capacity with a 4.4 per cent decline in 1992.

FIGURE 3.5
Scheduled Departing Seats per Week,
Affiliates and Independents, 1987-1992
(Domestic Southern Sector)



Air Canada Connectors and Canadian Partners both offered more capacity in 1992.

Air Canada's affiliates showed only modest capacity growth in 1992. As evident in Figure 3.5, their capacity on southern Canadian services averaged about 160,000 seats per week, representing an increase of about three per cent in average capacity for the year. The capacity of Canadi*n's affiliates had peaked in the third quarter of 1991 when Inter-Canadien returned to the fold, but has since dropped by over eight per cent. In spite of this latter reduction, their average capacity in 1992 was still 1.8 per cent higher than the previous year. At year end, aggregate capacity shares (including northern and transborder operations) remained steady with Air Canada affiliates at 18.7 per cent and Canadi*n affiliates at 16.9 per cent.

FIGURE 3.6
Domestic Scheduled Departing Seats
per Week: Fourth Quarter

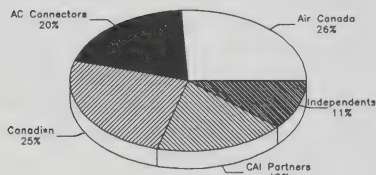


TABLE 3.2
Total Scheduled Departing Seats per Week, ('000s Seats):
Fourth Quarter

Carrier	Domestic Southern		Total Domestic		International		Total	
	1992	(%) change from 1991	1992	(%) change from 1991	1992	(%) change from 1991	1992	(%) change from 1991
Air Canada	228.5	(1.5)	228.5	(1.5)	53.6	7.4	282.1	0.0
Connectors	157.2	(1.7)	173.0	(2.8)	12.6	65.1	185.6	0.0
Sub-Total	385.7	(1.6)	401.5	(2.1)	66.2	15.0	467.7	0.0
Canadien	196.0	(5.2)	223.4	(8.3)	28.6	18.5	251.9	(5.9)
Partners ¹	127.6	(4.6)	158.0	(3.1)	9.3	107.0	167.3	(0.2)
Sub-Total	323.5	(5.0)	381.3	(6.2)	37.9	32.5	419.2	(3.7)
Independents ²	49.4	48.9	100.4	23.3	2.8	(41.1)	103.2	19.7
Total	758.6	(0.9)	883.2	(1.7)	106.9	17.6	990.1	0.1

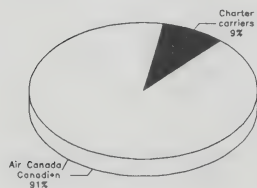
Notes: () Indicates negative figures.

1. Inter-Canadien included in 1991.

2. Comprises 52 independent airlines.

The share of total domestic capacity held by independents had fallen below nine per cent in 1991 after Intair ceased operations; however, Nationair's deployment of new capacity in scheduled service during the fourth quarter of 1992 boosted the share to over 11 per cent. Although higher than last year, this proportion is still lower than the 1990 independents' share of 14.5 per cent.

FIGURE 3.7
Charter Capacity on Selected City-Pairs*
Third Quarter



* Selected city pairs include Toronto to Vancouver/Calgary/Halifax/Winnipeg/Edmonton/St. John's/Saskatoon and Charlottetown; and Montreal to Vancouver.

In spite of Nationair's foray into scheduled services, the large jet charter carriers, as a group, reduced their domestic charter operations in the third quarter of 1992. Five city-pairs served by charter carriers in 1991 were dropped in 1992, and flights offered on other popular charter routes were cut by almost 20 per cent, with a corresponding decline in total seating capacity. These cuts reduced the charter carriers' share of total seating capacity on the nine long-haul routes they did serve to nine per cent, down from 11 per cent the previous year (see Figure 3.7). The cuts were especially severe on the Toronto-Halifax route with over 50 per cent fewer flights and seats in 1992, and on the Toronto-St. John's route which witnessed a decline in flights and seats of over 60 per cent. On the lucrative Toronto-Vancouver route, charter carriers still formed over 10 per cent of the total seating capacity offered, even though their capacity was down 4.4 per cent from 1991. Only on Toronto-Winnipeg and Montréal-Vancouver did the charter carriers increase flights and seats over the previous year.

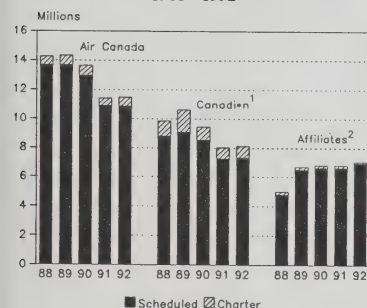
Industry Operations

Traffic

Passenger

The major airlines' traffic recovered slightly in 1992, but remained far below pre-recession 1989 levels.

FIGURE 3.8
Passengers Carried,
Majors and Affiliates
1988 - 1992



1. Includes Wardair in 1989
2. See notes to Table 3.3

Air Canada and Canadi*n carried 18.2 million passengers on scheduled services in 1992, a 0.4 per cent increase over 1991 and the first annual growth in traffic in the past three years. This level is still far from the pre-recession peak of almost 22.8 million passengers in 1989. Scheduled passenger-kilometres were up 5.6 per cent from the previous year, but this is primarily attributable to the airlines flying longer stage lengths. Total passenger-kilometres performed by Air Canada and Canadi*n reached over 41 billion in 1992, about 12 per cent lower than the 1989 level.

TABLE 3.3
Scheduled Passenger Traffic (Domestic and International)

	Passengers enplaned		Passenger-kilometres	
	1992 (^{000s})	Per cent change from 1991 ²	1992 (millions)	Per cent change from 1991 ²
Air Canada	10,857	(0.2)	21,463	5.7
Canadi*n	7,355	1.3	19,799	5.4
Affiliates ¹	6,934	4.5	3,099	8.7

Notes: () Indicates negative figures.

1. Includes Air Alliance, Air Atlantic, AirBC, Air Nova, Air Ontario, Calm Air, Canadian Partner, Inter-Canadien, NWT Air, and Time Air.
2. Based on revised 1991 figures.

The affiliate carriers rebounded from a 0.3 per cent decline in passengers carried in 1991 to a 4.5 per cent increase in 1992. Passenger-kilometres were up about nine per cent, again due mostly to flying longer stage lengths.

Enplanement statistics count passengers on each flight segment; **origin-destination** data count passengers by trip. Many trips involve multiple flight segments.

As the majors' and affiliates' passenger enplanements recovered from their 1991 lows, so too did their origin-destination traffic. After falling almost 17 per cent in 1991 from the 1990 peak, origin-destination passengers increased by five per cent in the first six months of 1992, rising to 5.7 million; however, this level is still down 12.5 per cent from pre-recession highs. Sixteen of the twenty-five largest city-pair markets experienced growth in traffic, especially Toronto-Vancouver which grew 11.6 per cent over the corresponding period in 1991. Three of the top 10 city-pairs had traffic declines, including Montréal-Toronto (-3.1 per cent) and Ottawa-Toronto (-1.4 per cent), the two largest. Calgary-

FIGURE 3.9

Shares of Scheduled Passenger-km, Majors, Affiliates and Independents, 1987-1992

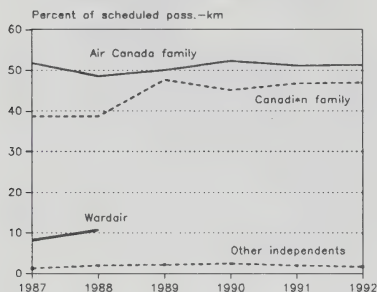
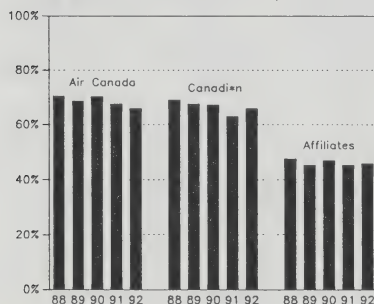


FIGURE 3.10

Load Factor on Scheduled Services, 1988-1992



Cargo volume handled at Canadian airports declined for the second year in a row.

Edmonton traffic also dropped over eight per cent from the previous year.

TABLE 3.4

Scheduled Passengers on Top Twenty-Five Domestic City-Pairs - January to June 1991 and 1992

City-pair	1992 Passengers	% increase (decrease) from 1991
Montréal-Toronto	571,420	(3.1)
Ottawa-Toronto	350,920	(1.4)
Toronto-Vancouver	300,450	11.6
Calgary-Vancouver	191,890	8.2
Calgary-Toronto	165,500	0.8
Edmonton-Vancouver	141,380	4.7
Toronto-Winnipeg	140,590	0.5
Halifax-Toronto	129,420	0.2
Calgary-Edmonton	126,290	(8.3)
Edmonton-Toronto	107,690	2.0
Thunder Bay-Toronto	92,400	6.4
Montréal-Vancouver	89,350	17.3
Vancouver-Winnipeg	75,120	13.1
Ottawa-Vancouver	72,130	14.5
Vancouver-Victoria	68,510	18.1
Calgary-Winnipeg	57,930	5.3
Halifax-Montréal	54,860	(3.5)
Prince George-Vancouver	54,760	4.1
Halifax-Ottawa	51,440	(9.1)
St. John's-Toronto	50,830	(2.5)
Ottawa-Winnipeg	47,200	4.7
Halifax-St. John's	45,900	(3.3)
Calgary-Montréal	43,650	(2.2)
Regina-Toronto	42,830	19.9
Calgary-Ottawa	40,030	(0.7)
Total (Top 25)	3,122,490	2.4
Total (all city pairs)	5,661,310	4.9

Cargo

For the first three quarters of 1992, the volume of cargo handled on major scheduled services at Canadian airports totalled 498.7 thousand tonnes, a decline of 2.8 per cent over the corresponding period in 1991, and the second straight year in which cargo volumes have fallen. Since 1990, cargo enplaned/deplaned has fallen over 7.5 per cent, reflecting the continuing impact of the recession. Domestic cargo, which represents 53 per cent of the total, fell 5.8 per cent, while transborder

FIGURE 3.11

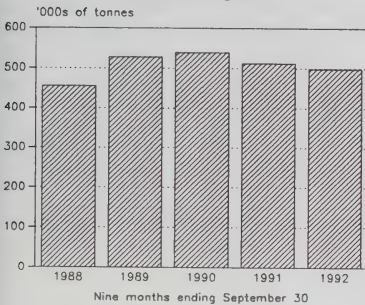
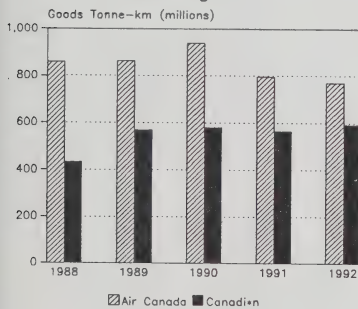
Cargo Handled on Scheduled Services
at Canadian Airports

FIGURE 3.12

Scheduled Cargo Traffic



and other international cargo rose 2.1 per cent and 0.2 per cent respectively.

Of the top 25 airports ranked in terms of cargo traffic, only four registered increases in volume handled; three of these airports, Vancouver, Calgary, and Winnipeg were in the top five, and managed growth in cargo volume of 5.0, 0.7, and 7.0 per cent, respectively.

Over 78 per cent of the air cargo carried on scheduled services moved through Toronto, Montréal, and Vancouver. Pearson International led the way with 43.1 per cent of the total, followed by Vancouver International with 19.3 per cent and the two Montréal-area airports with a combined total of 16.2 per cent. Mirabel accounts for three-quarters of the latter share, reflecting the airport's growing use as an international cargo hub in eastern Canada.

TABLE 3.5
Scheduled Cargo Traffic

	Tonnes		Goods Tonne-kilometres	
	1992	% change from 1991	1992 ('000s)	% change from 1991
Air Canada	232,704	(5.1)	771,606	(3.3)
Canadi*n	157,864	2.1	592,927	4.9

Note: () Indicates negative figures.

Air Canada, the dominant carrier of scheduled cargo in Canada, has continued to lose business during the recession, carrying 233 thousand tonnes of cargo in 1992, five per cent less than in 1991. Since the 1990 peak, Air Canada's cargo operations have fallen over 16 per cent. Tonne-kilometres have also fallen steadily, declining from 939.6 million in 1990 to 771.6 million in 1992, a reduction of almost 18 per cent. Canadi*n, on the other hand, has managed a modest recovery in its cargo business, recording a two per cent increase in tonnes carried to 151.9 thousand and a five per cent increase in tonne-km to 592.9 million. Although its tonnes carried are still off almost seven per cent from the 1989 peak (includes Wardair), tonne-kilometres are now 2.4 per cent higher.

Service

One hundred and fifty-four sample city-pairs¹ in both southern and northern Canada were analyzed with respect to changes in the levels of air service over the 1983-1992 period. The significance of comparisons with 1983 and 1987 is that these are the years preceding the initial

Service level indicators include total weekly scheduled departing direct (non-stop) flights, indirect (same-plane, one or more stops) flights, jet flights, non-jet flights, and available seats during the third quarter of each year. Connecting flights (different planes) are excluded in this analysis.

¹ A list of these routes is provided in Appendix C.1.

relaxation of economic regulation in 1984, and the implementation of the official legislative reforms of the *NTA*, 1987 on January 1, 1988.

Top Twenty-five Markets

Service levels in Canada's top 25 city-pairs¹ in 1992 rebounded by 5.5 per cent compared with 1991 in terms of the total flights offered (both direct and indirect) with a slight increase in available seat capacity of 1.4 per cent (table 3.6); this compares to declines of 12.2 and 15.4 per cent in flights and seats respectively, during the previous year. Both of these service indicators were lower than in 1987, but flights were up 63 per cent and available seats were up 14 per cent in comparison to 1983 levels.

After dropping substantially in 1991, service levels showed some improvement in 1992.

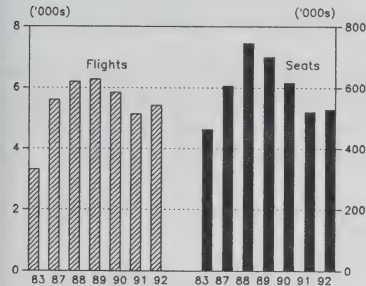
TABLE 3.6
Changes in Weekly Scheduled Air Service:
Third Quarter 1991 and 1992

	Total Flights (Direct & Indirect)		Seat Capacity	
	1992	% change over 1991	1992	% change over 1991
Montréal-Toronto	650	(2.5)	69,268	(1.5)
Ottawa-Toronto	506	4.8	41,581	5.3
Toronto-Vancouver	267	(1.8)	50,249	(11.0)
Calgary-Vancouver	603	8.6	52,172	5.5
Calgary-Toronto	187	8.1	30,587	1.0
Edmonton-Vancouver	197	(10.0)	19,026	(9.8)
Toronto-Winnipeg	187	1.6	20,377	3.5
Halifax-Toronto	225	2.3	26,450	(2.0)
Calgary-Edmonton	401	6.9	33,474	7.4
Edmonton-Toronto	136	17.2	15,735	(13.8)
Thunder Bay-Toronto	122	18.4	10,804	14.0
Montréal-Vancouver	81	11.0	11,494	14.0
Vancouver-Winnipeg	148	9.6	13,064	(3.8)
Ottawa-Vancouver	70	25.0	8,623	32.4
Vancouver-Victoria	496	22.8	16,633	14.3
Calgary-Winnipeg	158	5.3	12,805	5.4
Halifax-Montréal	210	11.7	16,397	4.0
Pr. George-Vancouver	96	(15.8)	8,334	(9.6)
Halifax-Ottawa	102	(6.4)	9,863	(5.7)
St. John's-Toronto	81	1.3	9,001	(0.5)
Ottawa-Winnipeg	54	10.2	6,133	0.2
Halifax-St. John's	222	0.0	17,641	(0.5)
Calgary-Montréal	78	16.4	10,813	30.4
Regina-Toronto	68	0.0	8,158	0.0
Calgary-Ottawa	75	38.9	9,001	44.3
Total	5,420	5.5	527,683	1.4

Note: City-pairs listed in order of passengers carried, January to June, 1992.

¹ A list of these routes is provided in Appendix C.1.

FIGURE 3.13
Weekly Scheduled Flights and Seats,
Top 25 Markets, Third Quarter



Jet and non-jet flights increased by 3.7 per cent and 12.3 per cent respectively, compared to 1991 levels, reflecting the continuing replacement of major airlines' jet services with their affiliates' turboprops. A variation on this trend was the replacement of AirBC jet services with turboprops.

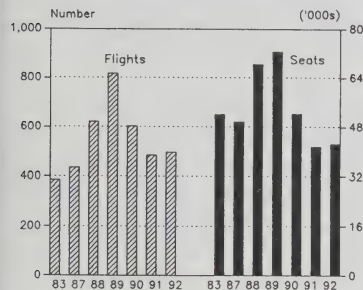
Most eastern markets declined in terms of available seat capacity, with the notable exception of Ottawa, which experienced growth on all links except Ottawa-Halifax. Capacity on the busy Ottawa-Toronto route grew about five per cent.

Calgary was the strongest of the western markets, showing stability or growth on all services, and exceptionally strong growth in available seats and flights between Calgary and Ottawa. Air Canada added a direct daily A320 return flight and Canadi*n upgraded half of its flights from B737s to A320s on this route.

A reduction in both flights and seats resulted from Central Mountain Air's withdrawal from the Vancouver-Prince George and Vancouver-Edmonton Municipal routes.

Inter-Regional Services

FIGURE 3.14
Weekly Scheduled Flights and Seats,
Inter-Regional, Third Quarter



Inter-regional services refer to routes, other than top 25 routes, that span one or more of the Atlantic, Québec, Ontario, or western regions of Canada. Flights on 18 of these inter-regional routes¹ increased by 2.5 per cent over 1991 while the number of available seats grew by 2.3 per cent. There was a shift toward indirect routings in 1992; however, indirect flights were still about six per cent lower than in 1987, while direct flights were up 43 per cent; the total number of flights has risen 14 per cent over the same period. Over the last five years, the trend has been toward the utilization of smaller, more efficient non-jet aircraft by regional carriers, providing direct services and bypassing regional hubs. The shift toward indirect routings in 1992 appears to be a short-term cost reduction strategy during a period of weak demand.

Air Atlantic dropped its service between Moncton and Toronto; Air Canada now offers the only direct flights on the route, and has dropped one daily round-trip following its competitor's withdrawal.

Air Canada switched its flights between Ottawa and Edmonton International from indirect to direct, but at the same time reduced the number of flights and seats available. Canadi*n's indirect (same-plane) services to Edmonton Municipal remained unchanged.

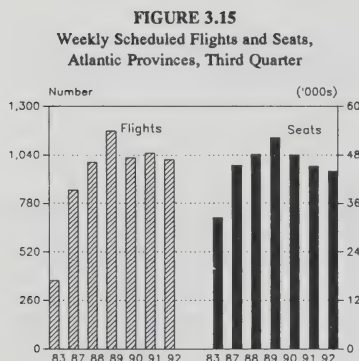
¹ A list of these routes is provided in Appendix C.1.

Because of schedules and routings, same-plane service is uni-directional on some city-pairs, such as Air Canada's new daily service from Vancouver to St. John's. Canadian added indirect service from Ottawa to Regina but Air Canada offers more same-plane flights the other way.

Air Nova added indirect jet flights from Moncton to Ottawa to its existing Ottawa to Moncton service. Both Air Atlantic and Air Nova had offered indirect jet flights from Deer Lake to Montréal; in 1992, Air Nova dropped same-plane service, while Air Atlantic added service in the other direction.

Atlantic Provinces

An examination of 13 city-pairs¹ in the Atlantic provinces indicated that total flights and available seats on these routes declined by about three per cent between the third quarters of 1991 and 1992.



There was some adjustment of flights in terms of direct and indirect (same plane), and jet and non-jet; however, the net effect on the region as a whole was small. Within the Atlantic provinces, Nova Scotia and New Brunswick showed large increases in non-jet services. Newfoundland showed a decline in non-jet services, and its drop in direct services overshadowed a rise in the other provinces' direct services for a net reduction in direct flights to, from and within the region.

The St. John's-Gander and Halifax-Sydney routes showed 41 and 12 per cent drops in available seats, respectively, while other routes benefitted from redeployment of equipment and expansion of Air Nova's services.

A new entrant in transborder air service is Northwest Airlink, a U.S. carrier introducing services between Boston and Saint John, Moncton and Charlottetown. Canadian carriers offer services connecting Boston with Saint John, Moncton, Fredericton, Charlottetown, Halifax, Yarmouth, and Sydney.

Ontario and Québec

A sample of 17 city-pairs¹ in Ontario and Québec showed that the total number of flights and available seats declined 4.8 and 4.2 per cent respectively in the third quarter of 1992 relative to the corresponding period in 1991.

Air Ontario was the only regional carrier to expand services on a number of the sampled city-pairs; Ontario Express implemented some reductions in service levels by employing smaller aircraft and/or dropping routes such as Hamilton-Ottawa/Montréal and Sudbury-Montréal. Its Hamilton-

¹ A list of these routes is provided in Appendix C.1.

Ottawa service was replaced by Air Laurentian and Pem Air, together offering almost the same frequencies as Ontario Express, but 43 per cent fewer seats; the Hamilton-Montréal route was picked up by Air Laurentian alone, offering two-thirds of the former frequencies but less than half of the seat capacity. There is no longer any same-plane service between Sudbury and Montréal.

Air Ontario increased service between London and both Toronto airports (Pearson International and Toronto Island), while Ontario Express implemented reductions on its London-Toronto (Pearson) operation; the net results were increases of 11 and 22 per cent in seat capacity offered on the Pearson and Toronto Island routes, respectively.

Air Ontario also expanded transborder services from the Toronto Island airport to Newark, and introduced service between Toronto's Pearson International and Baltimore; these connections complement existing services to Cleveland and Hartford. Ontario Express cut service to Indianapolis and Pittsburgh, and scaled down operations to Dayton, Columbus, Harrisburg and Allentown; these latter routes were cut completely in 1993. Ontario Express also withdrew from North Bay and several other northern Ontario points formerly served by Canadi*n Frontier.

Air Alliance and Inter-Canadien reduced flights on most Québec routes, except Québec-Îles de la Madeleine, which enjoyed an increase in both flights (11 per cent) and available seats (17 per cent). Air Alliance dropped services to Natashquan and Blanc Sablon, but opened new transborder links between Montréal and Boston, and Québec and Newark.

Inter-Canadien dropped its Gatineau-Québec service in favour of Ottawa-Québec; Air Alliance responded with increased Ottawa-Québec frequencies.

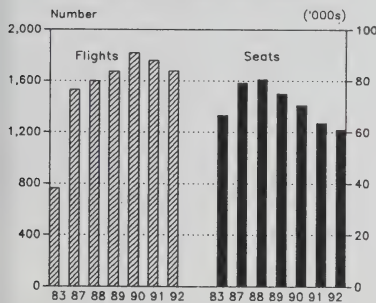
Air Canada inaugurated DC-9 jet service between Montréal and La Grande, but quickly cancelled it due to low traffic. Service between Toronto and Québec was stable, although available seats declined slightly due to the reconfiguration of the DC-9 fleet in late 1991 to include business class seating.

Bearskin Airlines added two new points to its network, Angling Lake and Wunnumin Lake.

Western Provinces

A sample of 22 city-pairs¹ in the prairie provinces and British Columbia showed that total available direct and indirect (same plane) flights

FIGURE 3.16
Weekly Scheduled Flights and Seats,
Ontario and Québec, Third Quarter

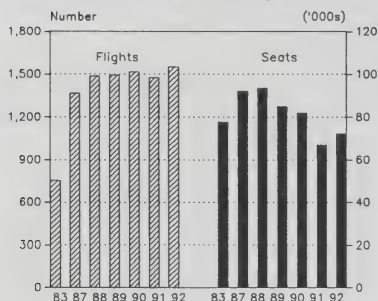


¹ A list of these routes is provided in Appendix C.1.

increased by five per cent in the third quarter of 1992 compared to the same period in 1991; available seat capacity rose 7.4 per cent.

Although total available seats are down 22 per cent since 1987 and seven per cent from 1983, total flights are up 13 and 106 per cent respectively, underlining the trend toward smaller aircraft and more frequent service.

FIGURE 3.17
Weekly Scheduled Flights and Seats,
Western Provinces, Third Quarter



Although many markets saw steady growth in capacity over 1991, due partially to equipment changes, there was notable activity in several Saskatchewan markets. On the Regina-Saskatoon route, Air Canada introduced DC-9 service and AirBC added more jet frequencies; a third competitor, Time Air, maintained its jet service but cut back on some turboprop flights. The net result was a sharp increase in available seats while total flights remained about the same. Air Canada withdrew same-plane service between Saskatoon and Winnipeg, leaving the regional affiliate carriers competing to fill the gap, Time Air with jet service and AirBC with turboprops. On this route, there was a net drop in the seat capacity offered.

There was heavy competition on three other western links, i.e. Edmonton-Winnipeg, where Air Canada and Time Air both increased services, Edmonton-Saskatoon, where Time Air faced increased AirBC jet frequencies, and Edmonton-Regina, where both AirBC and Time Air added indirect jet services.

Adjustments on the Regina-Vancouver route, where only Air Canada and AirBC offer same-plane service, resulted in more direct flights but fewer jet frequencies.

On the whole, most western provinces recorded steady growth in 1992 in terms of direct, indirect, jet and non-jet flights and total seat capacity offered; British Columbia was unique in that it experienced a sizeable increase in intra-provincial non-jet flights, at the expense of jet services.

Cargo

Cargo capacity continues to increase in the passenger fleets.

In June, 1992, Air Canada announced plans to dispose of its five DC-8-73 freighter aircraft and rely instead on the cargo capacity of its passenger and combi aircraft; however, the airline's commitment to a fleet of all-cargo aircraft was subsequently renewed until at least 1994. The DC-8s were sold to DHL Airways (part of DHL Worldwide Express) in February, 1993, and will be replaced with leased freighters.

With the additional cargo space in the B747 fleet and the replacement of the B727s with A320s, cargo capacity of Air Canada's passenger fleet has increased considerably.

Notes on Shippers' Survey

Analysis of the 1992 air freight section of the Shippers' Survey showed a slight shift toward the use of freight forwarders rather than dealing directly with air carriers. About 30 per cent of 1992 respondents used freight forwarders, while another 32 per cent used both methods.

Shippers using scheduled all-cargo services increased from 50 in 1991 to 55 per cent in 1992 while those relying on charter cargo services declined to five per cent. Shippers using cargo capacity on passenger services remained about the same at 40 per cent, in spite of continuing growth of belly cargo capacity in the airline fleets.

As in 1991, over half of all respondents indicated that their unit air freight costs had increased, mostly in the one to four per cent range. About 40 per cent experienced no changes in this regard.

Only six per cent of air freight users reported shipping their goods under confidential contracts with Canadian air carriers. This figure is unchanged from 1991.

Most respondents indicated that there had been no changes in service, capacity available, frequency of service, number of carriers, reliability of carriers, number of direct services, transit time, cargo handling, shipment tracing and liability coverage.

Written comments included with the survey responses showed a growing involvement and interest in international and transborder air freight services.

Canadi*n also replaced some B737s with A320s and added another B747-400, increasing cargo capacity of its passenger fleet on both domestic and international (trans-Pacific) markets.

The Air Canada-Continental Airlines link-up has implications for air cargo operations. Continental has a strong freight distribution system to Asia, surpassed only by United and Northwest Airlines; it also has excess cargo capacity in both the Atlantic and Pacific markets, and a major hub at Newark. This additional coverage and capacity should provide a valuable supplement to Air Canada's existing cargo operations.

Federal Express Canada announced a new hub operation to be established at Moncton, while United Parcel Service unveiled similar plans for a hub at Mirabel.

Agreement was reached late in 1992 by 15 international airlines (including Air Canada) on electronic distribution of marketing

More shippers are using all-cargo air services; many reported cost increases in the one to four per cent range.

A five per cent general fare increase in December was the first since 1990.

information for cargo services. Forwarders will be able to use standardized computer links to book air freight services in much the same way that travel agents use CRS terminals to book passenger seats.

Tariffs

In December, 1992, Air Canada and Canadi*n raised fares by five per cent on flights of more than 400 kilometres; this was the first general fare increase since 1990, although it excluded some high-traffic corridor routes such as Montréal-Toronto and Ottawa-Toronto.

The major carriers took various other initiatives to improve ticket revenues, increasing some deep-discount prices by five to 10 per cent, and cutting back on corporate discount agreements; on the other hand, they continued to compete on price as aggressively as ever, with each other as well as with independent challengers, using seat sales, regular discounts and other fare promotions. The difficulty of exercising any sort of disciplined price structure in the airline business is not confined to the Canadian industry, as evidenced by American Airlines' short-lived attempt to introduce a simplified, four-tier fare structure to the U.S. market in April, 1992.

Air Fares

Business fares have largely replaced the first-class fare in domestic markets, offering passengers additional convenience and on-board amenities. Business fares are usually available on inter-city and commuter routes and are priced about 12 to 15 per cent above the regular economy fare.

Economy or basic fares are the standard unrestricted fares offered on each route. These fares are commonly used by the "must-go" traveller who is unable or unwilling to meet the requirements attached to various discount fares.

Discount fares are priced below the economy fare (reductions range up to 80 per cent) and are available on almost all routes; however, these fares are restricted both in number and by other "fences" such as requirements for advance purchase, minimum or maximum stay, non-refundability, or off-peak travel. The size of the discount generally varies directly with the extent of restriction. Some discount fares are available throughout the year, while others are offered through seasonal "seat sales".

Taxes add to the average domestic fare.

Taxes payable on domestic air travel include the Air Transportation Tax, which is seven per cent of the base fare plus \$10 (maximum \$40), plus the seven per cent GST, which is calculated after the Air Transportation Tax is added. No provincial sales taxes apply, but for domestic flights departing from Québec, another four per cent is added. Transborder air

travel, in addition to the Air Transport Tax and GST, carries an additional U.S. departure tax and a customs charge amounting to about \$13 in total. International travel out of Canada carries a flat \$40 departure tax, with no GST or other charges.

Discount Fares

The supply of discount fares is largely controlled by airlines' yield management systems which use information on current competitive conditions and data from computer reservation systems to adjust the numbers of discount seats offered. These systems may boost traffic by increasing the size and number of discount fares, or sacrifice traffic by cutting back on discounts, whichever option produces more total revenue.

In 1992, there was a notable increase in discounting activity, mainly attributable to depressed demand levels, excess capacity in the system, and aggressive competition from independent carriers in key markets. In this intensely competitive environment, numerous discounts were introduced in attempts to capture additional traffic, and were countered with matching reductions by carriers determined to protect their market share. According to statistics for the second quarter, almost 69 per cent of all passengers travelling in southern Canada flew on discount fares. This figure is up from 65 per cent in 1991 and 63 per cent in 1990. The average 1992 discount (i.e., the amount by which the discount fare is reduced from the regular economy fare) was 34 per cent, as compared to 29 per cent for the previous year.

Top Twenty-five Routes

Based on comparisons of second quarter data, the average economy fare among the twenty-five most heavily-travelled domestic routes¹, measured in constant dollars, declined by 4.6 per cent in 1992 after increasing sharply in the previous year. The average discount fare dropped by over 15 per cent, in real terms, in 1992.

Close to 70 per cent of all passengers on these routes were travelling on discount fares compared with slightly over 65 per cent in 1991, with the growth almost entirely attributable to increased use of deep discounts (reductions exceeding 30 per cent). The proportion of discount travel reached 75 per cent or more on nine city-pairs, including most of the popular long-haul routes where the independent charter carriers are most active. On a dozen routes with no charter competitors, the proportion of discount traffic was less than 67 per cent. The overall discount rate on the top 25 routes widened to 55 per cent below the average economy fare. In the spring, some discounts of 80 per cent were reported, with return fares as low as \$239 between Toronto and Winnipeg or between

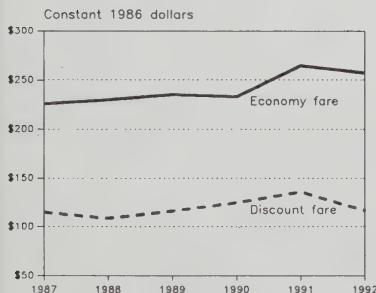
FIGURE 3.18

Discount Fare Usage,
Domestic Southern Sector
Second Quarter, 1988-1992



FIGURE 3.19

Average Air Fares, Top-25 City-Pairs,
Second Quarter, 1987-1992

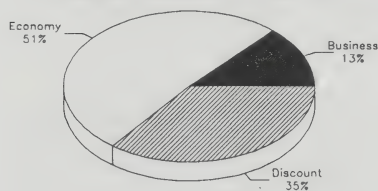


¹ A list of these routes is provided in Appendix C.1.

Toronto and Halifax, \$299 between Toronto and Calgary/Edmonton, and \$319 between Toronto and Vancouver.

Transborder and international business travel has increased substantially.

FIGURE 3.20
Commercial Travellers' Fare Usage, 1992



Business travellers were more price-sensitive in 1992.

Agency's Air Transport Surveys

The Agency continued its annual survey program in 1992 in cooperation with the Canadian Professional Sales Association and the North West Commercial Travellers' Association (now incorporating the Maritime Commercial Travellers' Association). These organizations represent the broadest cross-section of sales professionals across the country, many of whom are regular users of air services. Respondents to this year's survey showed the same stable averages of slightly more than 10 business trips and almost two pleasure trips during the year.

Travel was typically concentrated on mainline or corridor routes, with over 40 per cent of reported trips originating at Toronto's Pearson International airport. Surveys prior to 1991 identified virtually all business travel as domestic, but over the past five years, the proportion of transborder and international travel has grown from negligible levels to some 20 per cent.

Association members noticed a continuing decrease in the numbers of jet flights and direct (non-stop) services available, although this trend is less pronounced than previously. There was also a marked reduction in the amount of congestion reported at terminals.

A notable shift was evident with respect to air fares. Business travellers have traditionally been less price-sensitive than leisure travellers, but in 1992, price jumped in importance from fifth place to third, surpassing availability of direct flights and on-time performance and outranked only by arrival/departure times (1) and safety record (2). Large percentages of respondents noted increases in business, economy and discount fares, leading one out of four to switch to other transportation modes (mostly private automobile), and more than one-third to use fax, courier or teleconferencing in place of business travel. The usage of business and economy fares slipped further in 1992, with discount fare purchases increasing to over 35 per cent.

Fare class	Per cent shares		Per cent increase (decrease) over 1991
	1991	1992	
Business	15.7	13.4	(14.6)
Economy	53.8	51.2	(4.8)
Discount	30.5	35.4	16.1

Most business travellers are enrolled in at least one frequent flyer plan, and of the 45 per cent that cashed in accumulated points during the year, the great majority, (90 per cent) chose free travel as opposed to other benefits. It was also noted that some 18 per cent of respondents have made use of confidential contracts with airlines to obtain lower travel costs.

Among the additional comments included in the survey responses, there were some recurring themes. Support for the merging of Canada's two airlines was balanced by those insisting that competition in the industry is essential; however, certain aspects of airline competition were considered wasteful, such as the head-to-head scheduling of competitors' flights when the public would be better served by more variety in departure times. Another theme focused on declining levels of on-board comfort and amenities.

Again in 1992, most survey respondents felt that the quality of air services in general had not changed compared to the previous year, but almost one in three indicated that there had been a decrease.

Average yields for the affiliate carriers are considerably higher than those of the majors. This is due to a number of factors, including the use of smaller aircraft with higher operating costs per seat-kilometre, shorter average lengths of haul, lower load factors, lower proportions of discount passengers, and less international traffic. Based on data for the first nine months of 1992, yields for affiliate carriers declined slightly from 1991.

Fleet

Equipment transactions during the year reflected softening demand and the financial weakness prevalent in the industry. The major carriers deferred aircraft commitments where they could, while some independent carriers used the opportunity to replace older aircraft or expand their fleets.

Air Canada

As a result of Air Canada's conversion of two B747-200 combis to all-passenger configurations and the deployment of three new B747-400 combis into service on trans-Atlantic and some trans-continental routes, there was a general trickle-down of larger equipment replacing smaller aircraft over the entire route system.

The B727 fleet was retired late in the year, replaced by Airbus A320s. Twelve A320s were delivered in 1992, raising the Airbus fleet total to 31; nine more are on order, although arrangements were made to sell six of these to GPA Airbus Limited. The 35 DC-9-30s were reconfigured to provide business class seating, reducing their capacity from 100 seats to 92. No decision has yet to be made on whether to replace the DC-9s or retire them and turn over more lower-density routes to Air Canada Connectors.

There were two B767-300ERs scheduled for delivery in 1992; however, these were deferred until 1995 and two 1993 delivery positions are to be sold. There are two additional B767-300ERs scheduled for delivery in 1994.

One L1011 was sold to U.S.-based Orbital Sciences Corporation, leaving seven more still in desert storage awaiting disposal.

In February 1993, Air Canada announced the sale of its five DC-8-73F freighters to DHL Worldwide Express, with deliveries scheduled between October 1993 and April 1994.

Canadi*n

Canadi*n added a third B747-400 to trans-Pacific operations and continued the replacement of B737s with A320s. By year-end, it was operating 11 A320s, six more than in 1991. In early 1993, one A320

Fleet planning has been heavily influenced by prevailing financial situations.

*Canadi*n sold some aircraft
and delivery positions to raise
cash.*

was returned to the lessor and orders for three others were cancelled, leaving two A320s to be delivered in 1993 and five more in 1994. The B737 fleet was reduced to 48 in service (including nine B737 combis flying with Canadi*n North), plus four more that were removed from service for an indefinite period.

Negotiations proceeded late in 1992 and into early 1993 regarding the disposition of a B767-300ER; the sale would reportedly result in a net gain of \$16 million for the airline. Two B767-300ER delivery positions were also sold. Although aircraft values are down, the B767, in particular the long-range 300ER model, ranks as one of the more desirable aircraft on the market.

TABLE 3.7
Major Airlines' Fleet Composition

	1991	1992	On Order
Air Canada	19 A320s 18 B727s 9 B747s ³ 21 B767-200s 5 DC-8s ¹ 35 DC-9s <u>8 L1011s²</u> 115	31 A320s - 9 B747s 21 B767-200s 5 DC-8s ¹ 35 DC-9s <u>7 L1011s²</u> 108	9 A320s 6 B767-300ERs
Canadi*n	3 A310s ² 5 A320s 54 B737-200/Cs ⁴ 2 B747-400s 12 B767-300ERs <u>8 DC-10s</u> 84	- 11 A320s 52 B737-200/Cs ^{4,5} 3 B747-400s 12 B767-300ERs <u>8 DC-10s</u> 86	6 A320s

Notes: ¹ Cargo aircraft.

² In storage.

³ Three B747-400s are in storage.

⁴ Includes nine B737s assigned to Canadi*n North.

⁵ Includes four B737s in storage.

Three ex-Wardair A310s were sold to the Department of National Defence in 1992 for \$223 million, including spare parts, for a net gain to the company of \$50 million; the aircraft had been withdrawn from service and placed in storage in 1991.

Affiliates

Air Canada Connectors, AirBC and NWT Air, leased capacity to replace aircraft that were undergoing maintenance, but there was little activity in terms of new equipment purchases in 1992. AirBC took delivery of two Dash 8-100s and sold its Twin Otter landplanes, but continues to operate the Vancouver-Victoria harbour Twin Otter floatplane service.

*The affiliate carriers made
relatively few changes to their
fleets in 1992.*

Canadi*n affiliate Time Air had planned to replace Dash 8s with Jetstream 31s on some routes as part of the consolidation of Time Air, Ontario Express and Inter-Canadien operations under Canadian Regional Airlines; however, the plan was put on hold when the reorganization was postponed. The Calgary-Medicine Hat route was subcontracted to Kenn Borek Air until the corporate picture could be resolved; several surplus Dash 8-100s were subsequently leased out.

The restructuring of Ontario Express operations involved the elimination of its 19 and 30-seat aircraft (Jetstream 31s, Beech 1900s and Embraer 120 Brasilias) and reintroduction of larger 44-seat ATR42s. Six Ontario Express ATR42s are currently with Inter-Canadien's fleet.

Independents

Nationair added four B757s in support of new scheduled and expanded charter services, to bring its total of this aircraft type to nine; it also added two B747s (for a total of six) and retired its DC-8 fleet.

Several independents took advantage of the depressed market to lease modern equipment.

Air Transat added two B757s for charter work, and Canada 3000 was operating seven B757s at the end of the year.

Royal Airlines began charter service with a single B727 and added two more by the end of the year.

Air Creebec added a Dash 8-300 to its fleet to operate contract service with the Société d'énergie de la Baie James.

The first Dornier 228s in Canada were delivered to Aklak Air in 1992. These aircraft are comparable to Twin Otters, but are faster and more modern.

Bearskin Airlines acquired two 19-seat Fairchild Metros in 1992.

Concentration and Competition

The rapid expansion of air services in Canada following the relaxation of regulatory constraints in the mid-1980s was accompanied by substantial consolidation in the industry. Since 1988, the industry has been dominated by Air Canada and Canadi*n, together with their respective regional and local affiliate carriers. Both carrier families operate fully competitive coast-to-coast networks, as well as serving transborder and international markets, and between them they account for roughly 95 per cent of scheduled passenger traffic and revenues.

In spite of this apparent concentration in the industry, the level of "domination" at the route level has decreased considerably -- a point made by the Agency in previous Annual Reviews and recently confirmed in research conducted for the Royal Commission on National Passenger

Transportation. Contrary to the experience in the U.S., there has been a significant reduction of the dominant carriers' market share on most Canadian routes, and no monopolization of key hub airports by dominant carriers. Competition on domestic routes involves various combinations of major carriers, affiliate regional carriers, and independent operators; travel options include point-to-point charter flights versus scheduled network connections, direct versus indirect flights, jet versus turboprop aircraft; in virtually every segment of the market, there is intense and continuing competition for passenger traffic.

Competitive Balance

By 1988, the competitive balance that existed in the domestic market consisted of two industry heavyweights, that is, the Air Canada and Canadi*n families, but also included independent competitors such as Wardair, First Air and City Express, who represented almost 13 per cent of total scheduled capacity. In a bid to capture a 20 per cent share of passenger traffic, Wardair adopted an aggressive cut-rate pricing policy on its limited mainline route network, sparking the much-publicized fare wars of 1988.

Independents provide a continuing source of competition on major routes.

Since that time, the presence of independent competitors in many airline markets has consistently undermined the ability of the major airlines to impose their fare structures in a disciplined manner. In numerous instances, competitors in key markets have managed to dictate new levels of fare discounting. They have been able to impose their discount fares on the major airlines' fare structures simply because of the changeable nature of customer loyalty. In order to protect their market shares, the majors have been forced to match competitors' fare initiatives which divert traffic to competitors' services and threaten the viability of the majors' services not only in key markets, but throughout their networks. The synergies that exist between a coast-to-coast domestic network linked to transborder and international services are such that a drop in traffic in a limited number of high density markets may be sufficient to destabilize and jeopardize the profitability of the entire system. The difficulty of making short-term service adjustments leaves the majors no choice but to respond and match competitors' initiatives. This leads to truly intense competition in the marketplace, which can have destructive aspects. Most importantly, the current regulatory environment, with its ease of entry into domestic markets, has imposed a tough new discipline on carriers. As an example, their cost structures can no longer be significantly out of line with those of their existing and/or potential competitors.

In 1989, Wardair was taken over by PWA Corp. and amalgamated with Canadi*n, but a new, large independent quickly emerged. Intair, formerly Canadi*n's affiliate, Inter-Canadien, commenced operating an extensive 39-point network in eastern Canada, offering modern jet and turboprop service with low-priced fares. Large jet charter carriers such as Canada 3000, Vacationair, and Worldways ventured away from their

Independent Competition in Major Domestic Markets	
Wardair (1988)	Charter Carriers (1992)
Points served	
Montréal, Toronto, Ottawa, Winnipeg, Calgary, Edmonton, Vancouver	Montréal, Toronto, Ottawa, Winnipeg, Calgary, Edmonton, Vancouver, Halifax, St John's, Charlottetown, Regina, Saskatoon
Fleet	
3 B747s, 1 DC10, 12 A310s, 2 A300s, 18 jets	6 B747s, 4 L1011s, 18 B757s, 10 B727s, 38 jets

established niches and began to move onto popular long-haul domestic routes -- notably those served previously by Wardair -- providing another source of low-priced fare competition against the majors' scheduled services in key domestic markets.

In 1990, Nationair, Intair and First Air also launched domestic charter programs, followed by Air Transat the year after. By the end of 1991, the jet charter carriers accounted for fully 10 per cent of the total capacity offered on 14 of the busiest domestic routes where they competed directly with Air Canada and Canadi*n.

With the recession and the lengthy convalescence of the Canadian economy, carriers have had to struggle to maintain their traffic volume in the face of lower demand levels. The delivery of new aircraft ordered prior to the recession and the shrinkage in passenger counts had left excess capacity in many markets and turned up the competitive heat. There was heavy discounting across the national networks, particularly on long-haul domestic routes where family competition was supplemented with the presence of independent charter carriers. Competition from independents escalated further in October, 1992 when Nationair introduced scheduled service in the Toronto-Montréal corridor, challenging the majors with low-priced jet service on the most important domestic market. Nationair subsequently withdrew from the corridor, but not before it had forced Air Canada and Canadi*n to offer competitive discounts over a period of several months.

Low-cost independents target traffic that originates and terminates in high density markets.

Some observers believe that independent regional or charter carriers do not amount to any significant competition to major airlines, considering the latter's large-scale hub-and-spoke networks, computer reservation systems, frequent flyer plans, etc. Others see the combined network coverage and fleet capacity of the charter carriers as a serious competitive force on mainline routes where the majority of domestic traffic is concentrated. Their lower cost structures enable them to compete effectively for the large proportions of originating and terminating traffic in these high-density markets, at price levels where their larger competitors cannot operate profitably. Whether or not independent regional or charter carriers represent a source of competition depends on whether their services stimulate new (additional) demand or divert traffic from other carriers. This is a complex question, which is tied to the whole issue of "differentiation of services" -- another issue on which there is no current consensus.

Broader Competitive Focus

Worldwide, the airline industry is evolving from a patchwork of rigidly-regulated, state-owned national carriers toward a more integrated, market-driven environment; in many cases, protectionism is being eroded to some extent by large-scale international carrier alliances as a competitive strategy in global markets.

In Canada, the domestic market offers limited short-term growth potential for Air Canada and Canadi*n in view of the considerable difficulty of moving the economy out of recession. This has translated into slow traffic recovery, and has exacerbated the fierce route-level price and service competition as well as the excess capacity deployed. Much stronger growth is forecast for Canada-U.S. transborder traffic, based on the continuing effects of the Free Trade Agreement, Canadians' traditional attraction to U.S. "sunspot" destinations, and most importantly, the anticipated "Open Skies" agreement. There are also opportunities on a smaller scale in other international markets such as the Pacific Rim, Central and South America.

Competitive forces are also prevalent in the North American and global environment.

On the global scene, observers of the airline industry speculate that only eight mega-carriers will survive to the year 2000. Air Canada and Canadi*n already face large-scale competitors and alliances such as KLM-Northwest Airlines, Air France-Sabena-CSA, and the emerging British Airways-USAir partnership, that offer international routes through key continental "gateways" and connect with domestic points beyond. Canadian airports may serve as important gateways to the huge U.S. market, offering links to other international hubs in Europe or the Pacific Rim. Canada's airlines must make the best use of this potential to capture a viable share of growing international traffic. In 1992, Air Canada and Canadi*n gave the highest priority to the negotiation of alliances with large U.S. partners to position themselves most advantageously in this environment.

Such alliances provide financial assistance as well as marketing benefits associated with large route networks, "seamless" service, and integrated frequent flyer plans, but offer equally important economies of scale and scope. Opportunities are created to increase productivity and capitalize on expertise in the "non-flying" aspects of airline operations, such as information processing (including CRS services) and aircraft maintenance. For example, the provision of computerized services by AMR Corp. is a central feature of the proposed alliance between Canadi*n and American Airlines; in addition, the link-ups with American, United and Continental with their huge fleets (over 1,400 aircraft in total) would offer valuable opportunities to both Air Canada and Canadi*n to obtain contract maintenance work.

All of these international developments have implications for Air Canada's and Canadi*n's domestic operations, and although the competitive focus is broadening to the global level, there can be no real separation of the international and domestic components due to the synergies that exist between the two.

Computer Reservation Systems

Over the past three decades, Computer Reservation Systems (CRSs) have evolved into the single, most powerful tool used to sell air transportation

*Computer reservation systems
have opened a new
competitive front in the airline
industry.*

services, and the marketing of CRS services to airlines and travel agents has opened a new competitive front in the industry.

CRSs are expensive to develop, and the size of the initial investment required has limited such undertakings to a few large airlines. There has been substantial consolidation among CRSs as airlines sought to share costs and take advantage of economies of scale through joint system ownership. Today, most CRSs are operated as separate, arms-length companies, and it is estimated that the five largest -- Galileo (includes Covia and Gemini), Sabre, Worldspan, Amadeus, and SystemOne, currently control over 90 per cent of the world's airline reservation market. As an indication of the potential of this market, the total revenues of the CRS industry just in North America and Europe are currently estimated at about \$1.8 billion annually.

CRSs have developed far beyond the basic functions of listing services and fares, booking airline seats and issuing tickets; modern CRSs access millions of routes and fares, and can construct complicated itineraries with up-to-date prices, as well as providing additional features such as advance seat selection, boarding passes, frequent flyer data, pro-rate calculations, and market analyses.

Essentially, a CRS consists of three distinct components:

- the internal reservation system, containing the carrier's seat inventory together with associated information on seats sold, seats available, prices and other passenger information. Other carriers wishing to participate in a CRS can contract to have their internal reservation system managed or "hosted" by the CRS; for example, Air Canada's Reservac II and Canadi*n's Pegasus systems are both managed or "hosted" by Gemini;
- the distribution system, consisting of a network of telecommunications equipment and computer terminals which provides the links between the CRS and subscribing travel agents; and
- the complex computer software and high-speed switching systems required to receive travel agent inquiries, interface with various databases, assemble requested information, present the range of alternatives and register bookings on all hosted reservation systems. CRSs access railway, bus, hotel, and auto-rental databases as well as airline systems, and also communicate with each other. Gemini uses a customized version of Covia's Apollo system which incorporates special Canadian features such as a bilingual format, and provisions for charter airlines.

The data developed in the internal reservation system are used in numerous other airline functions, such as revenue or yield management programs, which employ data from the seat inventory together with other

current inputs to perform continuous adjustments to seat prices. These programs are not part of the CRS, but are operated in-house by the individual airlines.

CRSs receive fees for hosting internal reservation systems, plus a transaction fee from airlines and other listed suppliers for every product or service booked through it (about US\$2.15 for a seat on a flight, US\$3.50 for a car rental or hotel room). The CRS also earns income through leasing computer terminals and providing training and services to its main subscribers, the travel agents.

CRSs have been characterized as the nerve centre of airlines' passenger records, fares, and marketing intelligence, and play a key role in operations planning, revenue management and accounting functions. And while the world's airlines are suffering through the worst losses in their history, CRSs have remained a lucrative activity of the travel industry.

Financial Performance

*Air Canada and Canadi*n incurred combined losses of nearly \$1 billion in 1992.*

Airlines throughout the world faced similar conditions in 1992 -- reduced traffic, resulting in excess capacity, forcing carriers to stimulate demand through discounting; unit costs could not be reduced as rapidly as revenue yields declined, leading to unprecedented losses. Another important element has been interest charges, and together, these factors had considerable impact on the financial performance of Air Canada and Canadi*n.

Air Canada and Canadi*n either pursued or endeavoured to protect market share in the face of deteriorating demand and heightened competition. Against a backdrop of global airline losses of \$9 billion in 1992, both carriers posted record losses, totalling some \$997 million. This combined loss is disproportionately high considering that the operations of both carriers together represent less than three per cent of the world total number of passenger-kilometres.

Air Canada

Air Canada's operating loss of \$197 million was an improvement over 1991; non-operating charges more than doubled it to \$454 million.

While Air Canada's passenger traffic (in terms of revenue passenger-kilometres) grew five per cent over 1991, the deterioration in yields prevented any significant increase in operating revenues. Cost reduction initiatives were offset by increased capacity; operating expenses therefore remained stable, producing a net operating loss of \$197 million, slightly less than 1991's \$200 million loss. Within Air Canada's operating expenses are lower figures for fuel and maintenance, reflecting the newer, more efficient aircraft introduced into the fleet, but higher depreciation and aircraft rent, reflecting the increased value and cost of this new equipment. Staff reduction and retirement costs are up

\$16 million from 1991, to \$52 million, as a consequence of the work force reduction program.

Non-operating expenses were up by \$97 million due to:

- lower interest income due to a weakened cash position (\$23 million compared to \$44 million in 1991);
- higher interest expense due to increased borrowings (\$221 million versus \$200 million);
- a reduction in interest capitalized (\$8 million versus \$30 million);
- a larger loss on the sale of assets (\$29 million versus \$5 million);
- a larger loss on other investments (\$17 million versus \$6 million).

The largest single item contributing to the net loss of \$454 million in 1992 was the exhaustion of the company's ability to take advantage of income tax recoveries, which amounted to \$142 million in 1991.

TABLE 3.8
Air Canada's Financial Results (\$ millions)

	1988	1989	1990	1991	1992
Operating Revenue	3,404	3,618	3,899	3,485	3,501
Operating Expense	3,300	3,499	3,849	3,649	3,646
Operating Income (Loss)	98	103	(11)	(200)	(197)
Net Income (Loss)	89	149	(74)	(218)	(454)

PWA Corporation

The parent of Canadian Airlines International, PWA Corp., also posted the largest net loss in the company's history, due largely to a charge of \$333 million associated with the company's restructuring efforts.

The one-time charge reflects costs of cancelling and deferring aircraft, write-offs of certain investments (such as The Gemini Group and GPA Airbus Limited), and the cost of implementing the agreement reached December 29, 1992, with American Airline's parent, AMR Corp.

More than one-half of PWA Corp.'s record loss in 1992 was also attributable to non-operating charges.

Operating revenue and expenses and the operating loss were virtually unchanged for 1992 compared to 1991; however the company has secured employee wage concessions, suspended some payments to creditors, and obtained \$120 million in federal and provincial government loan guarantees. It has also eliminated unprofitable operations and negotiated the return of some aircraft.

TABLE 3.9
PWA Corporation's Financial Results (\$ millions)

	1988	1989	1990	1991	1992
Operating Revenue	2,284	2,649	2,746	2,872	2,877
Operating Expense	2,206	2,659	2,757	2,984	2,986
Operating Income (Loss)	78	(10)	(12)	(112)	(109)
Net Income (Loss)	30	(56)	(15)	(162)	(543)

Regional Affiliates

Financial data on affiliates' operations in the final quarter of 1992 were not available at the time of printing; however, based upon figures for the first nine months of the year, operating results showed some improvement over 1991. The affiliates' collective operating income increased by six per cent over the corresponding 1991 period, and although there was still a net loss, it was substantially reduced in 1992. This does not take into account any extraordinary charges related to restructuring that occurred in 1992.

Early results of the regional affiliates showed some improvement over 1991.

TABLE 3.10
Financial results of Air Canada's Connectors¹ and Canadi*n's Partners² (\$millions)

	1988	1989	1990	1991 ³	1992 ⁴
Operating Revenue	467.8	639.7	764.6	841.9	700.1
Operating Expense	429.6	584.2	704.3	793.9	663.4
Operating Income (Loss)	38.2	55.5	60.3	48.0	36.7
Net Income (Loss)	2.1	(2.0)	4.2	(30.6)	(13.8)

Notes: 1. Includes Air Nova, Air Alliance, Air Ontario, AirBC and NWT Air.

2. Includes Air Atlantic, Canadian Partner, Calm Air, Time Air, and Inter-Canadien, in 1991.

3. Revised figures.

4. First nine months only.

Government Initiatives

Royal Commission on National Passenger Transportation

With respect to the airline industry, the Royal Commission recommended the following:

- that governments abstain from making any financial contribution that is intended to ensure the survival of air carriers;
- that the existing limits on foreign ownership and control of air carriers be retained, but that the 10 per cent ceiling on individual holdings, which currently applies to Air Canada and PWA Corp., be eliminated;
- if there is only one major Canadian air carrier, that foreign airlines be allowed to serve Canadian routes; and
- that airports be transferred to local airport authorities while air navigation and air traffic control be converted to a Crown corporation or an independent institution.

The Royal Commission emphasized the importance of competition and market forces.

NTA Review Commission

Many submissions to the NTA Review Commission conveyed positive comments about the levels of air service and fares; some expressed concern over the financial condition of Canada's airlines and about services in some areas; views on the retention of regulation in the North were mixed.

NTARC called for a more liberalized regulatory regime for air services.

The Commission considered that air transport constitutes the most complex problem in Canadian transportation in this period of regulatory reform. Although both major air carriers are in dire financial straits, the Commission believed that the government should focus its efforts on maintaining competition and consumer choice.

To accomplish this, the Commission recommended that a higher level of foreign investment be allowed in Canadian airlines. It added that if an airline monopoly should develop, foreign carriers should be allowed to serve the domestic market, or to establish Canadian operations.

A number of other recommendations would clear the way for more effective integration of Canadian air services with U.S. and other international networks:

- liberalization of Canada-U.S. air bilateral arrangements;

- preparation for development of multilateral trade agreements in air services;
- publication of criteria applied in designating international air routes.
- relaxation of restrictions on air charter services;
- expedited Agency procedures concerning block space and code-sharing arrangements; and
- development of a future procedure for slot allocation.

The Commission also recommended that the existing regulation of northern air services be retained and reviewed again within five years.

Airport Improvements

In June, 1992, Transport Canada gave the go-ahead for building a second main runway at Vancouver International Airport. The new runway, estimated to cost \$110 million, should be completed by 1995. It will be financed and managed by the local Vancouver Airport Authority.

Major improvements were announced for Toronto's Pearson and Vancouver's International airports.

In December, the government awarded a \$750 million contract to Paxport Inc. to renovate and operate Terminals 1 and 2 at Pearson International Airport under lease from Transport Canada. The company plans to tear down Terminal 1 and build a single, new complex incorporating Terminal 2. Terminal 3 is owned and operated by another company, Claridge Holdings Inc.

In February 1993, Transport Canada announced plans to build three new runways at Pearson International. The project, expected to cost \$500-\$600 million, will proceed immediately with the construction of a new \$200 million north-south runway. Two more runways, running east-west, will be built in 1995-1996.

"Open Skies" Negotiations with the U.S.

The Canada - U.S. "Open Skies" talks, aimed at improving air service and opening up routes between the two countries, are expected to continue in 1993 after a pause to allow for the installation of the new Clinton administration in the U.S.

By the end of 1992, there was progress reported with respect to charter flights, an effective dispute settlement mechanism, and flexibility of rules governing such things as aircraft size and routing. Also, both sides agreed that Canadian carriers should be given a head start on some transborder routes; they differed, however, on how long U.S. carriers would have to wait before getting full access to Canada's three largest airports at Toronto, Montréal and Vancouver. Canada proposed a phase-

Some progress has been made, but certain obstacles remain.

in period of eight years, while the U.S. maintained that six years would be sufficient.

There are also major differences over "use-it-or-lose-it" conditions attached to the exclusive rights that Canadian carriers would have on certain routes, and over access to New York La Guardia, Chicago O'Hare and Washington National airports, including assurance of take-off and landing slots at reasonable cost. Other issues involve improved operation of facilitation agreements (e.g., customs and immigration pre-clearance for U.S.-bound passengers at Canadian airports) and "fifth freedom rights" (e.g., the right of a U.S. carrier to carry traffic between Canada and a third country).

Northern and Remote Areas

For air services, northern Canada includes Yukon and the Northwest Territories, and the northern parts of most provinces (Figure 3.22). In recognition of the importance of air services to northern and remote communities and the perceived fragility of existing air service networks, a certain degree of regulation was retained in the *NTA, 1987* for this designated area.

Northern Industry Structure

Licences

At the end of 1992, 614 carriers were licensed by the Agency to provide air services to, from, or within the designated northern area. The number of licences for scheduled air services remained the same at 41, although the total number of licences held for scheduled and non-scheduled services increased by 83 to 1,092.

Air Canada and Affiliates

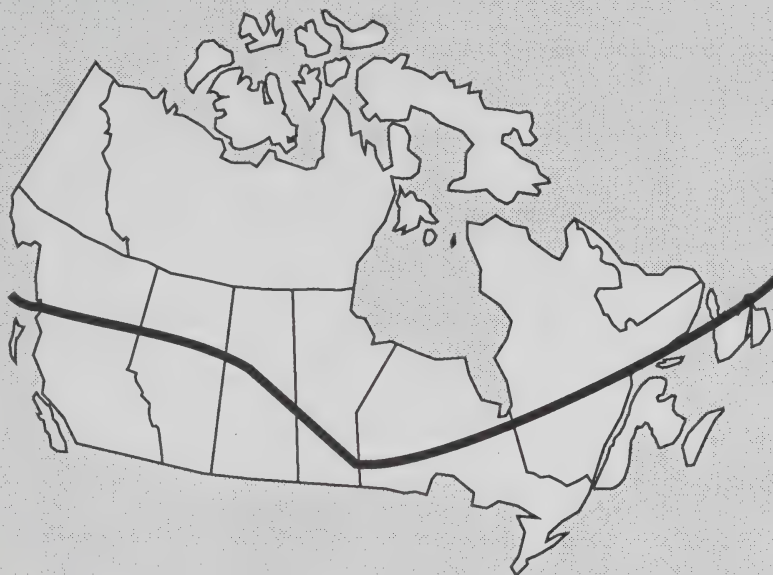
Air Canada introduced DC-9 service between Montréal and La Grande, Québec, near the James Bay hydro electric project; the service competed with Canadi*n flights, but was cancelled due to poor passenger demand.

Air Alliance began service late in 1991 to points along the lower north shore of the St. Lawrence, namely Blanc Sablon and Natashquan, but had dropped these by February of 1992. Air Nova still serves Blanc Sablon through its Newfoundland operations.

Canadi*n and Affiliates

Canadi*n is represented by Canadi*n North throughout most of the Northwest Territories, Yukon and northern Québec, along with the northern extensions of other Canadi*n Partners' route structures.

Changes in 1992 consisted mainly of minor network adjustments and redeployment of aircraft.

FIGURE 3.22: Scheduled Carriers Serving Northern Points, 1992

Carrier	Northern network	Fleet
Air Canada family (*denotes code-sharing only)		
AirBC	3 points in northern B.C. and Alta.	5 jets, 28 non-jets
Air Alliance	2 points in northern Que. and Nfld.	14 non-jets
Air Schefferville*	4 points in northern Que. and Nfld.	7 non-jets
Air Nova	3 points in northern Que. and Nfld.	5 jets, 10 non-jets
NWT Air	5 points in the N.W.T.	3 jets, 1 non-jet
Air Tindi*	5 points in the N.W.T.	15 non-jets
Aklak Air*	11 points in the N.W.T. and Yukon	14 non-jets
Buffalo Airways*	3 points in the N.W.T.	9 non-jets
Northwestern Air Lease*	6 points in northern Alta. and the N.W.T.	7 non-jets
Canadian Airlines family (*denotes code-sharing only)		
Canadian North	16 points in northern Man., Que., and the N.W.T.	9 jets
Air Atlantic	3 points in northern Nfld.	3 jets, 11 non-jets
Calm Air	25 points in northern Man. and the N.W.T.	8 non-jets
Canadian Partner	5 points in northern Ont.	19 non-jets
Inter-Canadien	13 points in northern Que. and Nfld.	12 non-jets
Alexandair*	12 points in northern Que.	19 non-jets
Time Air	12 points in northern B.C., Alta., Sask., the N.W.T. and Yukon	7 jets, 20 non-jets
Larger Independents (i.e. non-affiliated carriers serving at least ten points in the designated area)		
V. Kelnor Airways	27 points in northern Ont.	9 non-jets
Bearskin Lake Air Services	25 points in northern Man. and Ont.	31 non-jets
Labrador Airways	24 points in northern Que. and Nfld.	13 non-jets
First Air	21 points in northern Que. and the N.W.T.	4 jets, 18 non-jets
Air Inuit	19 points in northern Que. and the N.W.T.	15 non-jets
Skyward Aviation	19 points in northern Man.	10 non-jets
Gold Belt Air Transport	17 points in northern Ont.	7 non-jets
Northern Lights Air Services	16 points in northern Que. and Nfld.	3 non-jets
Sabourin Lake Airways	15 points in northern Man. and Ont.	9 non-jets
North - Wright Air	13 points in the N.W.T.	14 non-jets
Williston Lake Air Services	13 points in northern B.C.	4 non-jets
Air Crebec	12 points in northern Ont. and Que.	11 non-jets
Ptarmigan Airways	12 points in the N.W.T. and Yukon	7 non-jets
Trans Cote	11 points in northern Que.	7 non-jets
Air Manitoba	10 points in northern Man. and Ont.	14 non-jets

Inter-Canadien reorganized services to northern Québec and arranged for Alexandair to fly certain routes that were too "thin" for Inter-Canadien's 44-seat ATRs, mainly along the lower north shore. Alexandair ceased operations in early 1993.

Early in 1993, Ontario Express announced that, as part of its restructuring plan, it would be dropping all of the points formerly operated by Frontier Air (Canadian Frontier) including Timmins, Moosonee, Fort Albany, Kashechewan, and Attawapiskat as well as North Bay and Red Lake.

Independents

Air Inuit replaced its 19-seat Twin Otters with First Air's 44-seat HS.748 turboprops on several northern Québec routes, effectively doubling available seats to some centres; the displaced aircraft were then used to increase frequency of service on other routes. First Air dropped its Ottawa-Goose Bay service, but added new same-plane jet service through Iqaluit to Nanisivik, Resolute, and Yellowknife, and through Montréal to Kuujuaq.

Bearskin Airlines expanded operations from Thunder Bay and Sioux Lookout to points in north-western Ontario.

The Norcanair name re-emerged in 1992 after having sold its operations and equipment to Time Air in 1987. The new operation was based at Saskatoon and served points in northern Saskatchewan including Prince Albert, La Ronge, Wollaston, Stony Rapids, Fond du Lac and Uranium City. In May, however, Norcanair's two aircrafts were grounded by Transport Canada and later, in December, its licences were suspended.

Mackenzie Valley-based Air Sahtu ceased operating in August; its services were assumed by North-Wright Air of Norman Wells, NWT.

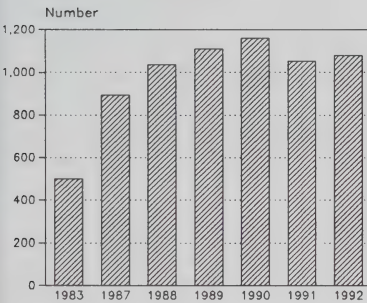
Northern Industry Operations

Service

A sample of 57 northern city-pairs¹ (representing routes to, from or between northern centres) showed that the total number of flights offered grew two per cent over 1991, 21 per cent over 1987 and 115 per cent over 1983. The majority of the growth since 1983 has been in flights between communities within the northern designated area, as opposed to north-south flights. The number of seats offered declined over 1991 but is up two per cent over 1987 and 29 per cent over 1983, again with the majority of the growth coming from flights between northern centres.

¹ A list of these routes is provided in Appendix C.1.

Figure 3.23
Weekly Scheduled Flights,
Northern and Remote Areas,
Third Quarter



Note: Trends in seating capacity are more difficult to track in the North due to the frequent reconfiguring of combi aircraft to meet changing market demands.

Cargo traffic at Iqaluit and Whitehorse increased substantially.

In terms of aircraft type, jet flights increased five per cent over 1991 while non-jet flights did not change significantly. The trend since 1983 has been an increase in jet service between northern points, brought about by expanded services by both Canadian North and First Air, and an increase in turboprop services between the north and south, driven by expansion of affiliate carrier networks to points in northern Québec, along the lower north shore, and in Newfoundland.

Inter-Canadien's reorganization of services to northern Québec and the redeployment of some of its own ATR42s affected several communities, including Sept-Îles, Havre St-Pierre, Natashquan, Harrington Harbour, St-Augustin, and Blanc Sablon. Routes affected by the redeployment of Air Inuit's fleet included Povungnituk to Inukjuvat, Sanikiluaq and Aklavik, Kuujuaq to Tasiujaq, Kangiqsujaq to Quaqtaq, and Kuujuarapik to La Grande, Sanikiluaq, Inukjuvat and Umiujaq.

Cargo

Northern and remote communities are more dependent on air cargo services than southern communities because of the relatively sparse infrastructure for other modes of transport. As a result, 13 of the top 30 Canadian airports, ranked by volume of cargo handled on scheduled services, are in the North (i.e., Goose Bay, Yellowknife, Iqaluit, Kuujuaq, Norman Wells, Whitehorse, Resolute Bay, Nanisivik, Inuvik, Kuujuarapik, Cambridge Bay, Wabush and La Grande).

Total cargo handled by northern airports during the first nine months of 1992 declined over seven per cent compared to the same period in 1991. Of the three largest centres, Goose Bay and Yellowknife declined slightly while Iqaluit handled 9.4 per cent more cargo than in the previous year. Among other northern points, Cambridge Bay and Kuujuarapik showed major cargo increases while Kuujuaq, Norman Wells, Resolute, Nanisivik and Inuvik all registered significant declines.

Freight capacity on scheduled services is provided largely by Canadian North's nine B737 combis, First Air's B727 combis, and NWT Air's three B737 combis and Hercules, as well as other turboprop aircraft. Smaller independent carriers offer additional capacity for shipment of air cargo on both scheduled and charter services.

Tariffs

Based on comparisons of second quarter data, the average economy fare among a sample of 25 northern routes¹, measured in constant dollars, declined by 4.5 per cent in 1992 while the average discount fare dropped by almost 18 per cent.

More northern passengers flew on discount fares in 1992.

¹ A list of these routes is provided in Appendix C.1.

The proportion of passengers flying on discount fares was over 53 per cent compared with less than 41 per cent in 1991, with the growth largely attributable to increased use of deep discounts (reductions

With respect to air services, the major concern of northern residents continues to be high tariffs.

Northern Air Survey

Of the northern communities and Indian bands represented in the 1992 survey, 30 per cent had no access to any other means of transport than air services.

In general, passenger services were relatively stable in 1992, with an average of 80 per cent of respondents indicating no changes. About 15 per cent noticed increases in the numbers of communities linked by direct or indirect scheduled service, and in the number of carriers providing charter services.

As in the previous year, three-quarters of the responses noted increases in fares, with 25 per cent indicating a decrease in the availability of discount fares. There were also declines noted in the frequency of flights (24%) and the availability of seats (20%). Respondents were split on whether the convenience of connecting services had increased or decreased. In terms of the overall quality of passenger services, 73 per cent felt there had been no change in 1992 but, of the rest, most thought it had gone down.

For cargo services, more than half of the respondents reported increased rates in 1992, a slightly lower proportion than in 1991. About 20 per cent noted decreases in frequency of flights, capacity available, and the reliability of carriers. Opinions on the overall quality of cargo services were similar to those on passenger services, with 76 per cent indicating no change, and most of the others noting a decrease.

There was little substitution of turboprops for jet aircraft during the year, but 20 per cent reported that carriers had acquired new aircraft to upgrade their services.

About one-quarter of respondents continue to use confidential contracts with carriers for air services.

The survey responses contained numerous additional comments, addressing familiar issues such as lack of local service and flight cancellations, but the greatest concern by far, is with increasing tariffs, with frequency and capacity of flights ranking a distant second.

exceeding 30 per cent). On four of these routes, the proportion of discount traffic exceeded the average of 70 per cent on the top 25 southern routes. The average discount rate increased from 32 per cent to 42 per cent below the regular economy fare in 1992.

RAIL SERVICES

Highlights of 1992

Structure

CN and CP Rail agreed to share a rail line in the Ottawa Valley, with further discussions on possible lines east of Winnipeg to follow, a first step towards potential joint utilization of rail infrastructure.

CP Rail has applied to the Agency to abandon its rail lines east of Sherbrooke, Québec.

Both railways continued to give a continental emphasis to their operations.

Performance

Overall traffic was down despite CN's growth of 5.5 per cent, as CP Rail recorded significant declines in coal shipments.

CN reported a \$1 billion loss in 1992, mostly due to charges for workforce adjustments which are to occur over the next three years. CP Rail also recorded a loss, again mainly because of workforce adjustment related expenses.

Developments

CN and CP Rail continued to invest heavily in double-stack container services and equipment, as well as tunnel clearance.

The Royal Commission on National Passenger Transportation recommended that VIA Rail should be given a corporate mandate and that its government subsidies be further reduced.

Numerous rail-related recommendations were made by the National Transportation Act Review Commission, including the streamlining of the line abandonment and creation of short line processes, removing the protection on Prairie branchlines and modifying the competitive access provisions. It also recommended the privatization of CN and a comprehensive study on separating railway operations from the ownership and maintenance of rail plant.

Industry Structure and Operations

Canada's two Class I freight railways, CN and CP Rail, generate more than 90 per cent of all Canadian railways freight revenues. CN's share of revenues surpassed that of CP Rail by 45 per cent. Class II railways - which are either regional railways, lines in Canada owned by U.S. railways or terminal/switching railways - account for a small portion of the total rail transport industry's revenues.

CN and CP Rail continue to move towards seamless North American transportation services.

In recent years, the two major Canadian railways have significantly changed the structure of their operations. As mentioned in the Agency's 1991 Annual Review, both railways have restructured operations to integrate domestic operations with their respective U.S. rail operations - the Soo Line and the Delaware and Hudson Railway (D&H) in the case of CP Rail; the Grand Trunk Western Railroad, the Duluth, Winnipeg and Pacific Railway, and the Central Vermont Railway in the case of CN. As a result, CP Rail System and CN North America were formed. In 1992, CP Rail System integrated its domestic intermodal marketing and sales functions in Canada and in the U.S. The objective of this move is to create a single North American organization with greater decision-making authority. This is in line with the seamless North American network approach introduced by both CP Rail System and CN North America. The two Class I freight railways have furthered their presence in the U.S. through alliances with some major railways.

In the United States, not to mention in North America, the two major Canadian railways signed agreements to increase the coverage of their services. Such agreements extend their market reach and allow them to take advantage of business opportunities. Key service arrangements developed in 1991 by CP Rail are reported below to emphasize this point:

CP Rail System increased its presence in the U.S. through alliances.

- CP Rail System and Consolidated Rail Corporation (Conrail) established joint service to expedite movements of containers between Montréal and Toronto and the Port of New York and New Jersey;
- a seven-year agreement under which the D&H is able to market and sell service from Buffalo to Chicago on the Norfolk Southern was formed;
- a similar agreement was created with the New York, Susquehanna & Western Railroad giving the D&H access to the New York metropolitan area and to bulk transload and warehouse facilities in the U.S. Northeast;
- a joint CP Rail System and Burlington Northern Railroad (BN) container service was introduced between Toronto/Montréal and markets in the U.S. Midwest and South.

CN also established its own alliances with U.S. railways.

CN North America became a partner in the first intermodal container service linking Canada, U.S. and Mexico.

In 1992, added to the list of agreements already in place between Canadian and U.S. railways was a haulage agreement between CN and BN. This agreement, reached at year end, streamlined the flow of freight from western Canada to Chicago and other U.S. markets. While so far most agreements put in place had the objective of streamlining the Canada-U.S. flow of freight, the following agreement reached in 1992 had a North American objective. CN North America teamed up with BN, Ferrocarriles Nacionales de Mexico (the state-owned Mexican railway) and Protexa Burlington International (a rail-barge service jointly owned by BN and Protexa, a private Mexican barge company) to increase its business opportunities in North America by eliminating customs difficulties and problems faced when dealing with different international rail networks.

These alliance agreements are reached when the potential to capitalize on market opportunities becomes apparent for companies involved. To achieve these results, the alliances have to promote faster delivery to destination, improve the competitiveness of carriers, keep pace with market demands, and improve customer service and market access.

The Agency dealt with four rail line conveyance cases in 1992, two involving CP Rail and two involving CN. While the four applications encompassed only 76 miles of track, it nevertheless represents an increase in conveyance activities, an indication that line conveyance may become more and more an alternative to abandonment. In 1992, the Agency approved the agreement between two wholly-owned subsidiaries of CP Rail, the Napierville Junction Railway Company (NJR) and the Atlantic North West Railway Company (A&NW), for the conveyance of 27 miles of track by lease to A&NW between Delson and the international border in Québec. The second application, approved by the Agency in March 1993, covered the remaining three miles of CP Rail's Boundary subdivision in Grand Forks, British Columbia to the Grand Forks Railway Company. One of the two CN conveyance applications involved conveying one mile of its St. Clair Tunnel subdivision to its wholly-owned subsidiary, the St. Clair Tunnel Company. The second case dealt with an offer from the Victoria County Railway to purchase 45 miles of CN track in southern Ontario between Stratford and Harriston.

CN notified the Agency in February 1993 of its plan to sell its lines between Truro and Sydney and its Oxford subdivision, all in Nova Scotia. The proposed sale to Cape Breton and Central Nova Scotia Railway Limited, a subsidiary of RailTex, a U.S. short line operator based in San Antonio, Texas, is for a total of 236 miles of track. In addition, CN has publicly indicated that five Ontario freight lines are up for sale to private investors: Cambridge-Guelph, Picton-Trenton, Barrie-Collingwood, Uthoff-Midland and Kitchener-Elmira. For three of the five lines, the Agency had previously denied CN's applications for abandonment.

CN and CP Rail plan to share infrastructure in the Ottawa Valley.

CN and CP Rail announced in 1992 that they had reached an agreement to share a line on a 300-mile corridor in the Ottawa Valley between DeBeaujeu, Québec and North Bay, Ontario, to eliminate unnecessary track and related facilities. Under the arrangement considered, the two companies would form a partnership to own a single line serving the Ottawa Valley and each railway would have running rights on the line. Before they can proceed with this proposed rationalization plan, the railways intend to consult with customers and communities along the existing routes. Such an initiative will also require prior governmental authorization before they can proceed with the project. The railways also initiated similar discussions for other lines east of Winnipeg. The reasoning behind such rationalization projects is to reduce the costs of owning and maintaining separate lines. The railways argue that duplication does not serve a competitive purpose in all areas. In November 1992, CP Rail System filed Notices of Intent with the Agency seeking authority to abandon its operation east of Sherbrooke, Québec.

Every year, carriers modify their operations to meet the changing needs of their "customers". The railways are no exception, as they continue to adjust their operations. Rationalization initiatives are not the only operational changes they have introduced. In recent years, the railways have also initiated innovative services to either solidify their market position, meet users' expectations or simply improve efficiency. Service initiatives have given a higher priority to customers' wishes by placing more emphasis on service factors, such as on-time performance for delivery and status of shipments in transit.

A number of service-related initiatives in 1992 are worth pointing out:

CN and CP Rail continued to adjust their respective infrastructure to accommodate double-stack container services.

- CP Rail System, under a long term contract with Shell, started to move a weekly unit train of liquid sulphur from a Shell Canada gas plant in Alberta to Chicago.
- CP Rail System completed experimental runs of double-stack container trains between Racine Terminal in the Port of Montréal and its Schiller Park intermodal terminal in Chicago. The tests determined the transit time competitiveness with other service routings between Montréal and Chicago.
- CN constructed three new yard tracks at the Port of Vancouver to serve the Lynnterm Docks.
- CN developed a service package to meet the needs of the beer industry and decided to invest more than \$9 million to buy two hundred 48 foot insulated domestic containers to handle the beverage business traffic.
- The two railways managed to convince unions to allow for the gradual phasing-in of two-person train crew operations. For CP Rail System,

this allowed for the extension between Montréal and Toronto of the Triple Crown RoadRailer train service.

- CP Rail System introduced regular double-stack container train service between the Port of Montréal and Metropolitan Toronto.
- CP Rail System finished its \$15 million tunnel clearance project in western Canada, a project undertaken to allow for trans-continental double-stack service in Canada. In preparation for this service, CP Rail System took delivery of 170 double-stack cars. CN North America ordered 347 new and rebuilt autocarriers.
- In the fall of 1992, CN introduced a new computer software system known as Computer Assisted Manual Block System (CAMBS) which allows for on-screen graphics to show the status and location of the switches on each line. This software also permits switches to be left open and closed by the crew on the following train; it also allows cabooseless trains to run on almost all CN North America rail lines in Canada, including low density lines. The extension of cabooseless services equates to cost savings.
- The St. Clair River tunnel project between Sarnia, Ontario and Port Huron, Michigan, announced by CN in 1991, received favourable rulings from the Canadian Coast Guard and from the U.S. Army Corps of Engineers. With favourable rulings now completed, CN can proceed with the construction.

*EDI improvements help
improve costs.*

CN announced at the end of 1992 that it planned to eliminate approximately one-third of its work force, or 10,000 jobs. These cuts are to occur over a three year period from 1993 to 1995. Three thousand positions are expected to be eliminated next year; with an additional 7,000 over the following two years. A further 1,000 jobs are expected to be cut on CN's U.S. subsidiaries over the same period.

CP Rail System, in keeping with its plan to reduce the train crew size from three to two, announced that it intends to eliminate 1,600 employees over the next few years. The majority of this reduction will occur on the Canadian side of CP Rail System's operations.

All in all, structural and operational changes implemented in 1992 by the two major Canadian railways can be summarized, as in previous years, as being a combination of the following factors:

- rationalization of rail networks;
- reduction of labour force to improve labour productivity;
- tunnel clearance;
- terminal development;
- EDI technology;
- equipment acquisition.

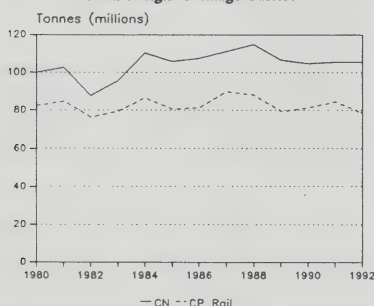
Total tonnage moved by all railways declined, mainly due to reduced coal and iron ore and concentrates shipments.

Traffic

Total railway loadings in Canada amounted to 237 million tonnes in 1992, down 5.6 per cent or 14 million tonnes from 1991. Over half of the decrease in 1992 was attributable to a reduction in coal shipments of nearly eight million tonnes. Iron ore and concentrates shipments, which are almost exclusively moved by Class II railways in Canada, were also down considerably in 1992: five million fewer tonnes were shipped, resulting in a decrease of 12.9 per cent.

Class I freight railways in Canada (CN and CP Rail) accounted for nearly 80 per cent of rail traffic moved in 1992, with CN handling 57 per cent of the volume. In 1992, 184 million tonnes were moved by CN and CP Rail, a drop of three per cent from their 1991 traffic volume. This decrease relates to a drop in CP Rail's 1992 traffic of six million tonnes, as CN's traffic level remained unchanged from 1991.

FIGURE 4.1
Total Freight Tonnage Carried



During 1992, traffic for CN and CP Rail combined decreased three per cent from the previous year.

An historical account of traffic shown in Figure 4.1 revealed only a marginal increase of one per cent in 1992, relative to 1980, with CN handling the majority of the traffic each year. Since 1980, CN has only dropped below its 1980 traffic level twice; once in 1982 and again in 1983. CN's 1992 traffic volume of 105.6 million tonnes was 5.5 per cent higher than its 1980 level of 100.1 million tonnes. Conversely, CP Rail experienced traffic levels below its 1980 volume seven times in the last 12 years. CP Rail's 1992 traffic volume at 78.5 million tonnes was 4.5 per cent lower than the 82.2 million tonnes moved in 1980. The recovery of grain movements since 1989 of 13 million tonnes enabled the railways to maintain traffic levels near their 1980 volumes, while other commodities experienced a decline over this period.

Variations in annual traffic volumes have been observed but, in absolute terms, there has not been any upward or downward trend in their traffic. While rail traffic volumes may have been relatively constant since 1980, shifts in traffic patterns have nevertheless been observed. For instance, in 1980, 50 per cent of all rail movements were destined to Canada; by 1992, the proportion of Canadian destined traffic had dropped to 37 per cent. In tonnage terms, Canadian destined traffic went from a total of 90 million tonnes in 1980 to 67 million tonnes in 1992. Therefore, the railways have seen a shift in their traffic towards more offshore and transborder destinations. Western exports witnessed the largest increase; an increase of 21 million tonnes in 1992 relative to 1980, followed by a growth of U.S. bound rail traffic of nine million tonnes. Eastern exports were the exception to this increase in international export traffic, with a decline of five million tonnes since 1980. A large degree of this decline was due to the shift of grain exports from the east coast to the west coast. The shifts in traffic patterns are indicative of the increasing importance of railways in Canada's external trade activities.

The focus will now be on significant traffic changes observed in 1992 relative to 1991, with further details provided in Table 4.1.

TABLE 4.1

TRAFFIC FLOWS BY REGION

TRAFFIC FLOWS BY REGION	
BRITISH COLUMBIA	
Shares of Key Commodity Traffic Originated from British Columbia	
1992 - 28.1 million tonnes of traffic originated from B.C. - 15% of total traffic	
<ul style="list-style-type: none"> • coal 60%; 91% exported through west coast ports • lumber 14%; 82% went to the United States • pulpwood chips 8%; moved mainly (81%) within British Columbia 	
1991 vs 1992	
<ul style="list-style-type: none"> • overall traffic down 22% • coal down 31% • lumber down 3% • pulpwood chips down 1% 	
Shares of Key Commodity Traffic Destined to British Columbia	
1992 - 9.8 million tonnes of traffic terminated in B.C. - 5% of total traffic	
<ul style="list-style-type: none"> • pulpwood chips 20% • inorganic bases (anhydrous ammonia and caustic soda) 7% 	
ALBERTA	
Shares of Key Commodity Traffic Originated from Alberta	
1992 - 41.1 million tonnes of traffic originated from Alberta - 22% of total traffic	
<ul style="list-style-type: none"> • coal 24%; 83% exported through west coast ports and 16% shipped to Ontario • wheat 15%; 94% exported, mainly through west coast ports • sulphur 11%; 66% exported offshore and 32% to the United States 	
1991 vs 1992	
<ul style="list-style-type: none"> • overall traffic down 1% • coal up 3% • wheat up 3% • sulphur down 19% 	
Shares of Key Commodity Traffic Destined to Alberta	
1992 - 7.2 million tonnes of traffic terminated in Alberta - 4% of total traffic	
<ul style="list-style-type: none"> • phosphate rock 12% • crushed limestone 10% 	

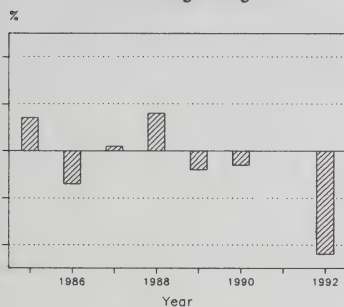
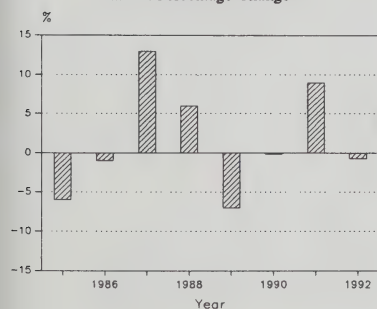
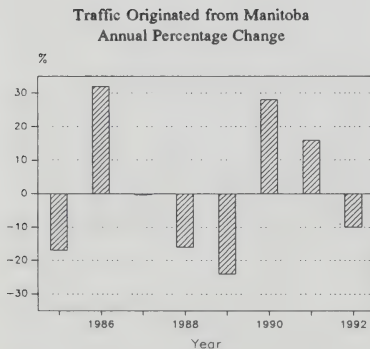
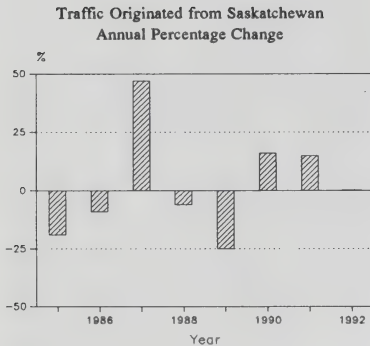
Traffic Originated from British Columbia
Annual Percentage ChangeTraffic Originated from Alberta
Annual Percentage Change

TABLE 4.1 (continued)

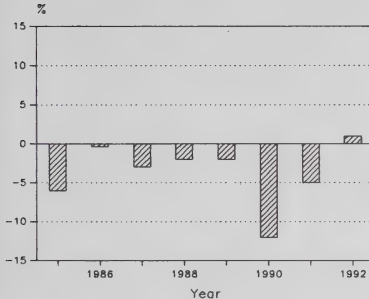


TRAFFIC FLOWS BY REGION
SASKATCHEWAN
Shares of Key Commodity Traffic Originated from Saskatchewan
1992 - 32.4 million tonnes of traffic originated from Saskatchewan - 18% of total traffic
<ul style="list-style-type: none"> wheat 48%; of exports 67% exported through west coast ports; 33% exported through ports in eastern Canada potash 27%; 34% exported through west coast ports and 52% exported to the United States barley 5%; 83% exported, mainly through west coast ports
1991 vs 1992
<ul style="list-style-type: none"> overall traffic remained constant wheat remained constant potash down 1% barley down 28%
Shares of Key Commodity Traffic Destined to Saskatchewan
1992 - 2.2 million tonnes of traffic terminated in Saskatchewan - 1% of total traffic
<ul style="list-style-type: none"> iron and steel 23%
MANITOBA
Shares of Key Commodity Traffic Originated from Manitoba
1992 - 8.6 million tonnes of traffic originated from Manitoba - 5% of total traffic
<ul style="list-style-type: none"> wheat 49%; 92% exported, mainly through ports in eastern Canada barley 7%; 79% exported, mainly through ports in western Canada rapeseed 7%; of exports 65% exported through west coast ports; 35% exported through east coast ports
1991 vs 1992
<ul style="list-style-type: none"> overall traffic down 10% wheat down 18% barley down 23% rapeseed up 22%
Shares of Key Commodity Traffic Destined to Manitoba
1992 - 3.5 million tonnes of traffic terminated in Manitoba - 2% of total traffic
<ul style="list-style-type: none"> coal 11%

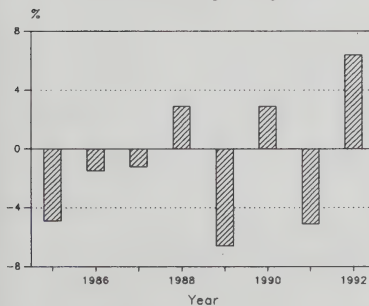
TABLE 4.1 (continued)

TRAFFIC FLOWS BY REGION	
ONTARIO	
Shares of Key Commodity Traffic Originated from Ontario	
1992 - 28.5 million tonnes of traffic originated from Ontario - 15% of total traffic <ul style="list-style-type: none"> • wide distribution of commodities each generated over 500,000 tonnes of traffic • nickel-copper ores 11% • woodpulp 5% • refined and manufactured gases 5% • 59% of traffic shipped to points within Canada, with 50% of Canada's total destined to Ontario • a further 32% of Ontario traffic was exported by rail to the United States 	
1991 vs 1992	
<ul style="list-style-type: none"> • overall traffic up 1% • nickel-copper ores down 10% • woodpulp up 8% • refined and manufactured gases remained constant 	
Shares of Key Commodity Traffic Destined to Ontario	
1992 - 26.2 million tonnes of traffic terminated in Ontario - 14% of total traffic <ul style="list-style-type: none"> • eleven commodities each accounted for over 500,000 tonnes of traffic • coal 13% • nickel-copper ores 11% 	
QUÉBEC	
Shares of Key Commodity Traffic Originated from Québec	
1992 - 15.7 million tonnes of traffic originated from Québec - 9% of total traffic <ul style="list-style-type: none"> • newsprint paper 15%; 79% went to the United States • pulpwood chips 7% • woodpulp 6% • 51% of traffic generated was shipped to points in Canada • an additional 43% was exported by rail to the United States 	
1991 vs 1992	
<ul style="list-style-type: none"> • overall traffic up 6% • newsprint paper up 1% • pulpwood chips up 7% • woodpulp up 12% 	
Shares of Key Commodity Traffic Destined to Québec	
1992 - 13.8 million tonnes of traffic terminated in Québec - 8% of total traffic <ul style="list-style-type: none"> • five commodities each accounted for over 500,000 tonnes of traffic • pulpwood chips 8% • common salt 4% 	

Traffic Originated from Ontario
Annual Percentage Change

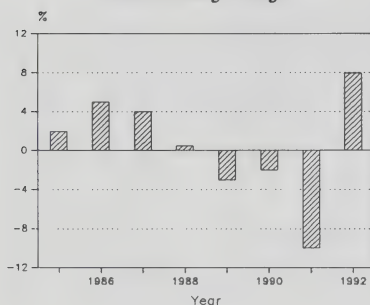


Traffic Originated from Québec
Annual Percentage Change



Annual percentage changes have been revised from previous years, as a small portion of Québec's originating traffic is now included under eastern imports.

Traffic Originated from Atlantic Canada
Annual Percentage Change



Traffic Originated from the U.S.
Annual Percentage Change

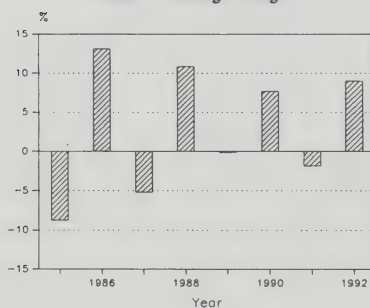
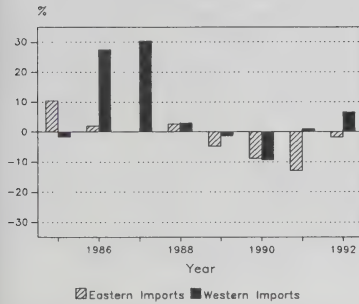
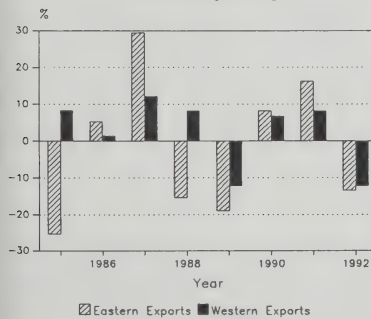


TABLE 4.1 (continued)

TRAFFIC FLOWS BY REGION	
ATLANTIC CANADA	
Shares of Key Commodity Traffic Originated from Atlantic Canada	
1992 - 10.4 million to traffic originated from Atlantic Canada - 6% of total traffic	
<ul style="list-style-type: none"> • gypsum 41%; exported through Atlantic ports • potash 17%; mainly exported through Atlantic ports • coal 10%; originated and terminated in Nova Scotia 	
1991 vs 1992	
<ul style="list-style-type: none"> • overall traffic up 8% • gypsum up 6% • potash up 3% • coal up 11% 	
Shares of Key Commodity Traffic Destined to Atlantic Canada	
1992 - 4.5 million tonnes of traffic terminated in Atlantic Canada - 3% of total traffic	
<ul style="list-style-type: none"> • coal 23% 	
UNITED STATES	
Shares of Key Commodity Traffic Originated from the United States	
1992 - 14.0 million tonnes of traffic originated from the U.S. - 8% of total traffic	
<ul style="list-style-type: none"> • 43% of traffic was destined to Ontario and Québec and a further 29% was re-exported to the U.S. by rail • container traffic 11% • groundwood printing and specialty paper 7% • automotive vehicles and parts 5% 	
1991 vs 1992	
<ul style="list-style-type: none"> • overall traffic up 9% • container traffic up 15% • groundwood printing and specialty paper up 22% • automotive vehicles and parts up 9% 	
Shares of Key Commodity Traffic Destined to the United States	
1992 - 40.2 million tonnes of traffic terminated in the U.S. - 22% of total traffic	
<ul style="list-style-type: none"> • lumber 12% • potash 12% • newsprint paper 8% 	

TABLE 4.1 (continued)
**Rail Traffic Originated at Ports
Annual Percentage Change**


Annual percentage changes have been revised from previous years, as a small portion of Québec's originating traffic is now included under eastern imports.

**Rail Traffic Destined for Exportation
Annual Percentage Change**


TRAFFIC FLOWS BY REGION

Shares of Key Commodity Traffic Originated at Ports

Rail Traffic Originated from East Coast Ports

1992 - 2.5 million tonnes of traffic originated from east coast ports - 1% of total traffic

- 59% of the traffic was destined to Ontario and Québec and 35% to the U.S.
- container traffic 88%

Rail Traffic Originated from West Coast Ports

1992 - 2.3 million tonnes of traffic originated from west coast ports - 1% of total traffic

- 80% of traffic, with the exception of phosphate rock, was destined to Ontario and Québec
- container traffic 47%
- phosphate rock 43%

1991 vs 1992

Rail Traffic Originated from East Coast Ports

- overall traffic down 2%

Rail Traffic Originated from West Coast Ports

- overall traffic up 7%

Shares of Key Commodity Traffic Destined for Exportation

Rail Traffic Destined to East Coast Ports

1992 - 20.5 million tonnes of traffic terminated at east coast ports - 11% of total traffic

- wheat 44%
- gypsum 21%
- potash 9%

Rail Traffic Destined to West Coast Ports

1992 - 55.6 million tonnes of traffic terminated at west coast ports - 30% of total traffic

- coal 42%
- wheat 28%
- sulphur 6%

1991 vs 1992

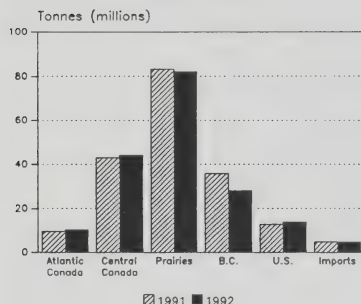
Rail Traffic Destined to East Coast Ports

- overall traffic down 17%

Rail Traffic Destined to West Coast Ports

- overall traffic down 12%

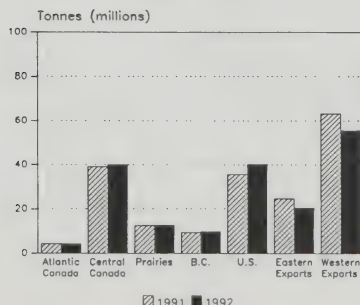
FIGURE 4.2
CN and CP Rail Tonnage
by Region of Origin
1991 vs. 1992



In 1992, originated traffic increased from regions east of Manitoba, from the U.S. and from western imports,...

...and decreased from B.C., Alberta, Manitoba and from eastern imports.

FIGURE 4.3
CN and CP Rail Tonnage
by Region of Destination
1991 vs. 1992



Origin of Traffic

When examined in terms of the region where the rail traffic originated, increases were observed in 1992 traffic volumes for the regions east of Manitoba, as well as in traffic from the U.S. and in import traffic arriving at the west coast. Traffic originating from Saskatchewan remained unchanged from 1991. However, traffic volumes in 1992 decreased from British Columbia, Alberta, Manitoba, as well as, import traffic arriving at the east coast. Figure 4.2 presents the aggregated volume of traffic carried by the two railways, breaking it down by region of origin.

Rail traffic from British Columbia dropped by approximately eight million tonnes, a 22 per cent decline from 1991. Over seven million tonnes of the decrease was attributable to a drop in CP Rail's coal shipments for export. CN also experienced in 1992, a decline in its traffic from British Columbia.

In the Prairie provinces, overall traffic was down marginally; a one per cent drop relative to the 1991 level. However, Manitoba generated 10 per cent less traffic, a situation which affected both CN and CP Rail. Overall traffic out of Saskatchewan remained unchanged, with CP Rail's gain of one million tonnes being offset by an equivalent decline in CN's tonnage moved out of the province. Alberta accounted for slightly less traffic in 1992 than in the previous year for both railways. The rail traffic originating from the Prairie provinces was mainly grain, coal and potash shipments, all of which were largely exported.

CN experienced a gain in its 1992 traffic out of Ontario, which was largely offset by a decline by CP Rail. Both railways benefitted from increased volumes of traffic out of Québec in 1992. The slight increase in 1992 in CN and CP Rail combined traffic from Ontario followed seven years of annual declines. Both railways experienced a similar growth in traffic from Atlantic Canada and the U.S. However, despite an overall growth in western imports, the railways had differing results. CN had an increase of 22 per cent, while CP Rail had a seven per cent decrease.

Destination of Traffic

When rail traffic is examined in terms of destinations, 1992 was a year where the distribution of traffic by region within Canada remained relatively unchanged. However, offshore exports fell by nearly 12 million tonnes in 1992. This was offset partially in 1992, by an increase in U.S. destined traffic of approximately five million tonnes. The distribution by region of destination of rail traffic for the years 1991 and 1992 is presented in Figure 4.3. Sixty-five per cent of the decline of the offshore exports was experienced from the west coast. Again, this was mainly attributable to the reduced B.C. coal shipments that are usually

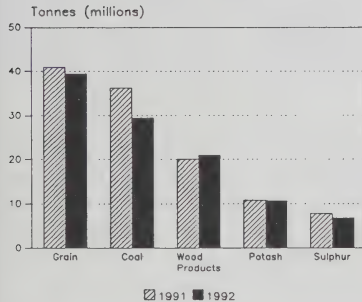
United States destined traffic was up for the third straight year.

exported. The increase in 1992, in U.S. destined traffic was the largest increase of the past three years. This is indicative of the increasing importance of the North-South traffic flows.

Western Canada generated 110 million tonnes of the total 184 million tonnes of rail traffic in 1992, but only 23 million tonnes of traffic were destined to that region. Over 60 per cent of the total rail traffic is destined for the U.S. or offshore markets. Most of the traffic originating from western Canada is bulk commodities destined for the U.S. and offshore markets.

Major Commodities Moving by Rail

FIGURE 4.4
CN and CP Rail Tonnage
for Selected Commodities
1991 vs. 1992



Grain consists primarily of wheat, barley and canola. Wood products consist of lumber, woodpulp and pulpwood chips. Newsprint paper is also included.

Movements of bulk commodities such as grain, coal, wood products, potash and sulphur make up 58 per cent of total traffic moved in 1992. This is down from 61 per cent in 1991. In terms of revenues, these bulk commodities have dropped from 53 per cent of total revenues in 1991, to 52 per cent in 1992. Eighty-one per cent of this bulk traffic is destined to U.S. or offshore markets. Figure 4.4 illustrates the traffic volumes of these major commodities for 1991 and 1992.

There are another 16 commodities which each generated between one and five million tonnes of rail traffic in 1992. These commodities represent another 31 million tonnes or 17 per cent of total traffic and are predominantly bulk commodities. In terms of tonnage, the top two commodities in this group are gypsum and nickel-copper ores. Within this group, passenger automobiles (vehicles and chassis) accounted for 1.4 million tonnes of traffic in 1992, but was eighth in terms of revenues generated.

The total traffic for the 21 commodities, which individually generated a minimum of one million tonnes of traffic, accounted for three-quarters of the total 1992 rail traffic. Another important component of railway traffic, especially in terms of revenues, is intermodal shipments.

Grain

The Canadian grain industry relies heavily on rail transportation to move several types of grain such as wheat, barley and canola to markets. In fact, wheat alone accounted for over 70 per cent of 1992 rail grain movements, followed by barley at 10 per cent. In 1992, rail grain movements accounted for one-fifth of total CN and CP Rail traffic. Over 85 per cent of this grain traffic was destined to the U.S. or offshore markets. Relative to 1991, grain traffic declined by 3.7 per cent, with the distribution of exports being altered. U.S. bound traffic accounted for 6.5 per cent of the total grain traffic, an increase of 16.5 per cent from 1991. Over one-half of all grain rail movements in 1992 went to the west coast to be exported, as a result of a 6.7 per cent increase from 1991. There were 4.4 million fewer tonnes of grain moved by rail to the east coast to be exported, a 30 per cent drop in traffic volume, due

Grain rail shipments to the east coast were down 30 per cent in 1992.

mainly to disruptions in wheat shipments to the former Soviet Union. The first disruption was a three month ban on loading their vessels due to suspected moth infestation. The second disruption occurred when payments in arrears to Canada exceeded \$1.5 billion. Domestically, grain traffic to Ontario increased by over one million tonnes contributing to the 27 per cent increase in domestic grain traffic.

Coal

The coal industry endured labour disputes and increased competitive international markets in 1992. These factors contributed to lower production, industry losses and, consequently, to a reduction in the volume of coal moved by rail.

British Columbia coal traffic was down as the result of labour disruptions and mine closures.

Two large coal mines in B.C. were shut down due to labour disruptions. In late August 1992, Westar Mining Ltd. was forced into bankruptcy following the resignation of all its directors and the collapse of restructuring talks. By year end, Teck Corporation successfully purchased the Balmer mine and Fording Coal Ltd. won the bidding for the Greenhills mine. Also, employees at the Fording River operations of Fording Coal Ltd. were on strike from early May until production resumed in late December.

British Columbia coal represents almost 60 per cent of all Canadian coal traffic. CP Rail experienced virtually the entire drop in traffic as it services the mines that were shut down. The overall drop in coal traffic in 1992 of seven million tonnes was primarily attributed to the shutdowns. Alberta, which represents approximately one-fourth of coal traffic, experienced a slight increase in 1992. Eighty per cent of all coal traffic in the country is exported through west coast ports, while slightly more than 10 per cent is destined for Ontario.

Wood Products

For CN and CP Rail, the wood products sector accounts for three key sources of commodity traffic: lumber, woodpulp and pulpwood chips. In addition, newsprint paper draws one of its key raw materials from the wood product sector. These four commodities combined represented nearly 21 million tonnes of rail traffic in 1992, up 4.5 per cent from 1991. This combined tonnage was third largest amongst commodities, behind grain and coal in 1992 and accounted for 11 per cent of total rail traffic. Individually, three of the four commodities experienced an increase in traffic volumes in 1992 relative to 1991, the exception being pulpwood chips.

Lumber rail shipments to the U.S. increased.

Lumber traffic was up six per cent in 1992 to 6.5 million tonnes. This growth in traffic was attributable to increased shipments to the U.S. The U.S. received three-quarters of all rail lumber shipments from CN and CP Rail in 1992, up from two-thirds in 1991. The increase in U.S. shipments was partially a result of the increase in housing starts in the

U.S. in 1992, as well as, the demand for lumber after the effects of Hurricane Andrew. In addition, early in 1992, lumber prices in the U.S. increased between 30 and 50 per cent, as the government restricted logging on federal timberland. Somewhat offsetting the favourable conditions for Canadian lumber was the import tariff imposed on Canadian softwood lumber to the U.S. There was a decline in lumber traffic destined to Ontario in 1992 resulting from a lower number of housing starts in central Canada. Lumber traffic for this region fell by 30 per cent. Central Canada represented 20 per cent of total 1992 originated rail lumber traffic. Two-thirds of the lumber traffic originating from central Canada was destined for the U.S., up from one-half in 1991. This increase represented the majority of the growth in U.S. bound lumber traffic, despite the fact that the majority of U.S. bound traffic originates from British Columbia.

*Fifty per cent of rail
woodpulp movements went to
the U.S.*

Woodpulp traffic was up by eight per cent in 1992 reaching 6.3 million tonnes. Rail woodpulp movements increased despite Canadian mills shutting down for part of 1992, in an attempt to restrict supply and firm up demand. There is currently a global overcapacity of woodpulp production as world supply has grown by 13 per cent since 1988. Prices in 1992 did recover somewhat from the 30 per cent drop in 1991.

One-half of all rail woodpulp shipments by CN and CP Rail were destined to the U.S. in 1992, similar to the situation in 1991. The increase in overall volume resulted from traffic to B.C. and traffic destined for export from the west coast. CN ordered 500 new boxcars worth \$33 million to handle the increase in western Canada's woodpulp movements destined for Asia and Europe. There was also a minor increase in central Canada originated woodpulp destined for export from the east coast.

*U.S. destinations accounted
for 75 per cent of all rail
newsprint paper traffic.*

Newsprint paper traffic was up two per cent in 1992 to 4.1 million tonnes. Despite the slight increase in shipments, the newsprint paper industry still lost money, with overcapacity in the industry having driven down prices. Traffic patterns for newsprint paper in 1992 remained unchanged from 1991. Over 80 per cent of rail newsprint paper movements originated from central Canada, with approximately 80 per cent of this traffic destined to the U.S. The U.S., in fact, accounted for three-quarters of all destined rail newsprint paper traffic in 1992.

Pulpwood Chips traffic was down by almost one per cent in 1992 to 4.0 million tonnes. Traffic patterns for pulpwood chips in 1992 remained unchanged from 1991. Approximately 60 per cent of rail pulpwood chips traffic originated from British Columbia, with the rest being from central Canada. Rail movements for this commodity tend to be for short distances as evidenced by the average length of haul for pulpwood chips moved by rail being only one-third the length of that for all rail traffic. This was observed in the traffic patterns of pulpwood chips. All rail shipments of pulpwood chips destined to British Columbia originated in that province. A similar pattern was observed for central Canada

destined traffic. Also, all pulpwood chips traffic to the west coast for export originated from British Columbia and was moved a relatively short distance to port.

Potash

Potash rail traffic to the U.S. increased by 20 per cent.

Within Canada, Saskatchewan accounts for 85 per cent of total Canadian potash production and New Brunswick accounts for the remaining 15 per cent. Ninety per cent of Canadian produced potash is exported, Ontario being the only major domestic destination. Potash from New Brunswick was almost all exported through eastern ports, while Saskatchewan potash accounted for all west coast exports and virtually all U.S. bound traffic. In 1992, while potash traffic remained unchanged at 10.7 million tonnes, traffic to the U.S. grew by over 20 per cent to 4.7 million tonnes. As potash is important to the fertilizer industry, this increase in traffic to the U.S. was mostly due to favourable crop conditions that prevailed during the first half of 1992, combined with higher planted acreage for corn.

International prices for potash were quite stable during 1992. Prices rose during the spring with the conclusion of contract agreements with Far East buyers. At year-end, Vancouver f.o.b. prices were listed at US \$114-115 per tonne.

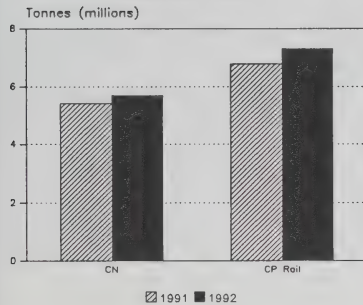
Sulphur

Rail shipments of sulphur, in both domestic and export markets declined.

Sulphur traffic decreased by 13 per cent in 1992, as a result of reduced demand for Canadian sulphur. Shipments to the domestic market fell and exports to the U.S. remained short of sales projections made at the beginning of the year. The reasons for the shortfall were a combination of plant closures in the U.S. and increased competition between domestic and foreign suppliers. Overall, offshore shipments of sulphur declined in 1992. Gains were made in several foreign markets, however these gains did not offset lower sales to Tunisia, the former Soviet Union, Mexico and India. Growing competition from Middle East suppliers accounted for some of this decline.

Approximately 70 per cent of Canadian sulphur originates in Alberta, with virtually all the remaining sulphur coming from central Canada. Sulphur shipments from Alberta dropped by 20 per cent in 1992 to 4.7 million tonnes. Of the Alberta sulphur, two-thirds was destined for exports through west coast ports, and a further 30 per cent was delivered to the U.S. Forty per cent of central Canada sulphur was shipped for consumption in Ontario or Québec, while over one-half was destined to the U.S. CP Rail responded to shippers' demand in 1992, by launching a service from Shell Canada's gas plant in Alberta, whereby an entire trainload of liquid sulphur was moved from Alberta to Chicago. From there, various other U.S. railways moved the shipment to destinations in North Carolina and Florida.

FIGURE 4.5
CN and CP Rail
Intermodal Traffic



Along with a decline in sulphur shipments, sulphur prices also decreased in 1992. Year end prices for sulphur were quoted at US \$48 per tonne.

Intermodal

Many commodities move on rail intermodal services and as a result, this type of traffic accounts for a significant proportion of the railways' tonnage. In terms of tonnage, it generated the fourth largest volume of traffic for the railways. This category ranked second in terms of revenues generated by CN and CP Rail. The railways have made important investments in recent years to modernize their intermodal services. In 1992, intermodal traffic increased by 6.6 per cent to 13 million tonnes (Figure 4.5). A discussion on intermodal traffic flows is presented in the Intermodal Services section.

Competition

Confidential Contracts

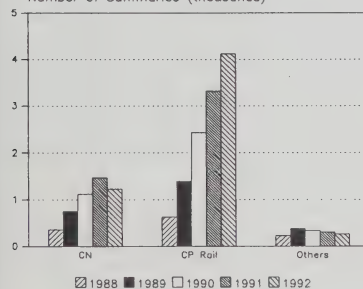
Contract Filings

In 1992, summaries of new confidential contracts filed with the Agency reached a record level with 5,614 contracts. This was an increase in new filings of 10 per cent over 1991. Figure 4.6 provides a distribution by railway of contracts filed in 1992. While CP Rail filed over 4,100 contract summaries and CN over 1,200, the remaining contract summaries were filed by the following railways: Algoma Central (AC), Burlington Northern (BN), Consolidated Rail Corporation (Conrail), CSX Transportation (CSXT), Norfolk Southern (NS) and Wisconsin Central (WC).

Despite only a 10 per cent growth in contract filings, the number of confidential contracts filed yearly in Canada has grown more than four-fold since 1988, the first year contracts became lawful in Canada. CP Rail, for the fourth straight year, continued to increase its share of total filings. CP Rail had over 73 per cent of all new contracts signed in 1992, compared to 65 per cent the year before and 51 per cent in 1988. CN's constant share of approximately 30 per cent of annual contracts filed in each of the first four years, fell to 22 per cent in 1992, while the share for the other carriers fell to five per cent. Notably, CN had less new contract summaries in 1992 than in 1991.

Both CN and CP Rail oppose the filing of confidential contracts with the Agency. The railways contend that the Agency can examine confidential contracts as the need arises instead of the railways submitting every new contract. As well, the National Transportation Act Review Commission (NTARC) concluded there is little reason for the railways to continue filing contracts with the Agency.

FIGURE 4.6
Number of Confidential Contract Summaries
Number of Summaries (thousands)



Shippers and Confidential Contracts

Over 70 per cent of rail shippers surveyed had a contract.

In 1992, 71 per cent of rail users who responded to the Agency's shippers' survey reported having a contract. This was an increase from 64 per cent in 1991. The percentage of shippers who reported having contracts varied by size of rail shipper. Two-fifths of small rail users in 1992, i.e., those with estimated freight bills of under one million dollars, reported having a contract; in 1991, 31 per cent of small rail shippers indicated having confidential contracts with Canadian railways. Three-quarters of medium rail shippers, i.e., shippers with an annual freight bill between one and ten million dollars, indicated moving their rail traffic under confidential contract, down from 85 per cent in 1991. When it comes to the large rail shippers, i.e., those with an annual freight bill exceeding ten million dollars, 99 per cent of them stated having confidential contracts, a slight increase from 1991.

Large rail shippers with confidential contracts moved 80 per cent of rail traffic under contract.

Rail users with confidential contracts in 1992, on average, had 68 per cent of their rail traffic moved under contract, down slightly from 70 per cent in 1991. This proportion varied according to the size of shipper. For instance, for both small and medium shippers, roughly 55 per cent of their rail traffic moved under confidential contract terms and conditions, compared to 80 per cent for large rail shippers' traffic. Shippers were asked to compare their 1992 proportion of traffic moved under contract with 1991. One-fourth of rail shippers reported that the proportion of their traffic that moved under contract was greater in 1992 than in 1991, while almost all of the other respondents reported no change. Of those rail shippers that reported a higher proportion of their rail traffic moving under contract in 1992 than in 1991, a difference by size of shipper was observed. In 1992, on average, 30 per cent of medium sized rail shippers reported moving a greater proportion of their traffic under contract than in 1991, followed by 22 per cent of large rail shippers and 16 per cent of small rail shippers.

Based on survey responses, rail shippers were classified according to the 25 industries listed in the questionnaire, with some companies indicating that they belonged to more than one industry. In 1992, shippers from 23 of the 25 industries listed in the survey questionnaire reported having contracts, the two exceptions being the furniture and fixtures industry and the printing, publishing and allied industries sector. Shippers in the chemical, mining, quarrying and oil well, food products, and paper and allied products industries listed having confidential contracts most often, with contracts listed least often in the leather and allied products, beverage, tobacco products, rubber products, primary textile and textile products, clothing products, and machinery industries.

Most contracts are renewed with changes.

Three-fifths of responding rail shippers reported they had confidential contracts with Canadian railways which expired in 1992. Almost 80 per cent of these respondents renewed their contracts with changes, one-half of which were at the request of both the shipper and the carrier.

Shippers continued to rank "rate concessions" as the most important factor in negotiating confidential contracts. This was followed by "service guarantees", "rate escalation guarantees" and then "equipment guarantees" (Table 4.2). The ranking has remained the same for the last three years, with service and rate escalation guarantees reversing order in 1988 and 1989. This ranking of factors in 1992 did not vary by size of rail shipper.

TABLE 4.2
Factors of Importance to Shippers in Confidential Contracts

Factor	Rank				
	1988	1989	1990	1991	1992
Rate Concessions	1	1	1	1	1
Service Guarantees	3	3	2	2	2
Rate Escalation Guarantees	2	2	3	2	3
Equipment Guarantees	4	4	4	4	4

Access to other modes replaced confidential contract as most important factor.

Rail shippers surveyed in 1992 indicated that "access to other modes of transportation" was the most important factor to achieve competitive terms and conditions for rail services. This differs from 1991 survey results, where "confidential contract" was identified as the most important factor. Only large rail shippers in 1992 continued to rank confidential contracts first, while both small and medium rail shippers ranked contracts second.

Sixty-five per cent of shippers without contracts were using rail services for no more than 20 per cent of their traffic. Conversely, rail shippers with contracts relied more extensively on rail services for their transportation needs.

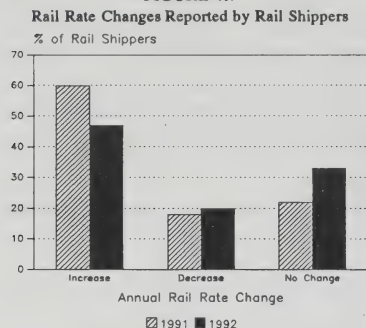
Over 85 per cent of shippers who reported an improvement in rail service had a contract. However, while there was only eight per cent of rail users reporting a deterioration in rail service in 1992, over 70 per cent of them had a contract.

Rate Levels

Average rail rates increased slightly in 1992.

In 1992, respondents to the shippers' survey reported an average unweighted rail rate increase of 0.25 per cent over 1991. Almost one-half of these rail shippers reported an increase, while one-fifth reported a decrease and the remaining one-third reported no change in their rail rates from last year (Figure 4.7). Nearly all the shippers who reported a rate increase from 1991, had an increase of four per cent or less. Of the shippers who reported a decrease in rates from last year, slightly more than one-half experienced a decrease of four per cent or less, while one-quarter had a decrease of between five and eight per cent.

FIGURE 4.7



While average increases were similar for each size of rail shipper, average decreases for small rail shippers were more than twice as great as those rates for either medium or large shippers. Despite the fact that small rail shippers had a greater average rate decrease, only 12 per cent of small shippers reported a decrease, compared to 30 per cent for large shippers. In fact, large shippers averaged a slight decrease in their overall rates compared to 1991.

Rail rate changes from 1991 varied by industry grouping. Some industries, such as the food products and paper and allied products industries, reported rate increases below the overall average of 0.25 per cent for all shippers; other industries, such as the mining, wood, plastic and chemical products, and agricultural services industries faced above average increases.

Of the shippers who indicated they were in contract negotiations with Canadian railways in 1992, two-fifths stated they used the possibility of interswitching as a bargaining tool in their rate negotiation. Only 32 per cent of small shippers used this bargaining tool, compared to almost one-half of large shippers.

Eighty-three per cent of rail shippers reported confidential contract rates lower than published tariff rates in 1992. This situation differed by size of shipper, varying between 70 per cent for small shippers to 95 per cent for large rail users. Only four per cent of rail users in 1992 reported contract rates higher than published tariff rates.

Shippers with confidential contracts reported smaller rate increases than those without contracts.

Changes in rate levels can be examined by differentiating between rate changes faced by shippers with confidential contracts versus rate changes experienced by rail shippers without contracts. In 1992, on average, rail shippers with contracts experienced a rate increase of 0.2 per cent, compared to 0.7 per cent for rail shippers without contracts. The lower average rate increase for shippers with contracts was observed amongst all sizes of rail shippers. In fact, survey results indicated that, on average, large rail shippers moving traffic under contract benefitted from a slight reduction in their rail rate in 1992 relative to 1991. Overall, 20 per cent of rail shippers reported a reduction in rates in 1992. Of those shippers with reductions, over 85 per cent had contracts. Large rail shippers reported a higher proportion of rate reductions than the average for all shippers, at 30 per cent.

More large rail shippers reported decreases than increases in contract rates in 1992.

Shippers were asked to compare their confidential contract rates in 1992 with those of 1991. More respondents indicated increases in rates than decreases, with 37 per cent reporting no change in contract rates between the two years. The higher percentage of shippers reporting increased as opposed to decreased rates was observed amongst both small and medium rail shippers. However, more large rail shippers reported lower contract rates in 1992 compared to 1991 than higher contract rates. One-third of large shippers reported lower contract rates in 1992 compared to one-tenth of small shippers. Conversely, one-fourth of large shippers

reported higher contract rates in 1992, compared to two-fifths of small shippers.

Both rail and truck shippers preferred to negotiate a reduction, when faced with a rate increase.

When faced with a general commodity rail rate increase in 1992, the most common response of rail shippers was to "negotiate a reduction", followed by "absorbing the increase" and thirdly by "entering into a confidential contract". In 1991, however, when faced with a general commodity rail rate increase, shippers indicated more frequently that they would "absorb the increase". The second most frequently used solution was to "negotiate a reduction", while the third most popular solution was to enter into a contract agreement. In 1992, most medium and large shippers reacted the same way to a proposed rail rate increase, while most small shippers that were confronted with a proposed increase, opted to absorb the increase.

TABLE 4.3
Shippers' Response to Proposed Rate Increase by Carrier

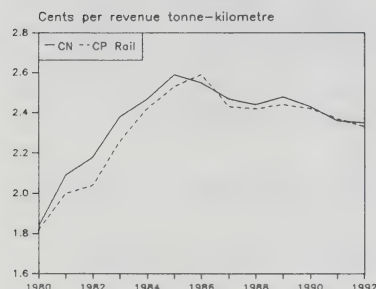
	Rail				
	1988	1989	1990	1991	1992
	<i>(percentage of respondents)</i>				
Absorb Increase	25	31	34	39	28
Negotiate Reduction	36	31	35	38	36
Intra-Modal Carrier Switch	6	3	3	4	6
Inter-Modal Carrier Switch	15	13	12	19	19
	Truckload				
	1988	1989	1990	1991	1992
Absorb Increase	18	23	33	24	22
Negotiate Reduction	52	49	50	56	60
Intra-Modal Carrier Switch	25	32	31	33	34
Inter-Modal Carrier Switch	3	3	5	4	3

The action taken by shippers using trucking services, when presented with a proposed rate increase, clearly indicated a difference in options available to rail users. As indicated in Table 4.3, from 1988 to 1992, between 25 and 34 per cent of survey respondents indicated they switched their traffic to a different trucking firm when confronted with a proposed truckload rate increase. This is in contrast to the three to six per cent of rail users who switched to another railway. Over the same period, a much higher percentage of rail shippers, from 12 to 19 per cent responded to a proposed rate increase by switching to another mode, compared to only three to five per cent for truckload users. In 1992 however, the most popular reaction to a proposed rate increase by both rail and truckload survey respondents was to "successfully negotiate a

reduction in the increase". Also notable was the fact that rail shippers were less willing to "absorb a rate increase" in 1992 than in 1991; 28 per cent of rail users indicated having absorbed the increase compared to 39 per cent in 1991.

From a railway perspective, the change in the average freight revenue per tonne-kilometre is an important benchmark of financial performance. This measurement can be affected by several factors including traffic mix and length of haul. The railways move commodities that are charged a relatively low rate per tonne, as well as other commodities that generate a high rate per tonne. The mix of this traffic from year to year can cause the average revenue per tonne-kilometre to vary. Similarly, the variation in the length of haul of commodities can cause a change in the average revenue per tonne-kilometre; average revenues usually decline as distances over which the traffic is carried becomes longer. As illustrated in Figure 4.8, revenue yields in 1992 for both railways have declined for the third consecutive year. CP Rail stated in its submission to NTARC that the decline in their yield was "largely attributable to lower rates caused by the working of the Act". CN, in its submission to NTARC, also indicated that the reduced rates were influenced by provisions of the *NTA, 1987*. The average revenue per tonne-kilometre carried by the railways peaked in 1985 and 1986, two to three years before the new Act.

FIGURE 4.8
Freight Revenue
CN and CP Rail



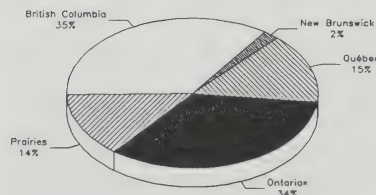
Figures for 1992 are preliminary.

Competitive Access and Dispute Resolution

Interswitching

According to the interswitching provisions in the *NTA, 1987*, a shipper located on one railway can have its traffic interchanged to another railway for the line-haul, when the point of origin of a movement of traffic is within a radius of 30 kilometres of an interchange. The Agency has the responsibility to determine maximum rates to be charged for an interswitching move. Similar provisions apply with respect to terminating traffic.

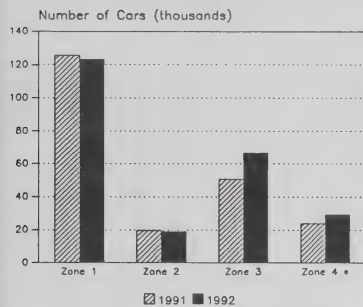
FIGURE 4.9
Cars Interswitched in 1992
CN and CP Rail



* The majority of cars interswitched were at Thunder Bay and involved grain cars.

The number of cars interswitched by CN and CP Rail for all railways in Canada in 1992 amounted to over 238,000 cars, an increase of eight per cent from last year. Ninety per cent of total cars interswitched by these two railways were with each other. Besides CN, CP Rail interswitched cars with BN; for CN, the other carriers in importance following CP Rail for interswitching activity were CSXT, BN and Conrail. Figure 4.9 illustrates the distribution of the cars interswitched by region for CN and CP Rail combined. In 1992, British Columbia had the largest share of cars interswitched with 35 per cent of the total. Most of this activity occurred at Vancouver. Ontario was second, in terms of volume of cars interswitched, with Thunder Bay having a significant number of grain cars moved under special agreements between CN and CP Rail.

FIGURE 4.10
Interswitching by Zone
CN and CP Rail



Figures for 1992 are preliminary.

*Includes approximately 600 cars reported outside 30 kilometre limit.

Four zones, based on radius distances from an interchange point, have been established by the Agency for the purpose of setting maximum rates. Zone 1 covers distances up to 6.4 kilometres and is equivalent to the four mile limit in effect before 1988; zone 2 is delimited by distances ranging from over 6.4 kilometres to 10 kilometres; zone 3 deals with distances from over 10 kilometres to 20 kilometres; and zone 4 is for distances over 20 to 30 kilometres. Figure 4.10 gives a breakdown by zone of interswitching activities in 1991 and 1992 for CN and CP Rail combined. In 1992, zone 1 accounted for 52 per cent of all cars interswitched by the two railways, compared to 57 per cent in 1991. On an individual railway basis, zone 1 represented 50 per cent of the total number of cars interswitched in 1992 by CN, compared to 65 per cent in 1988. In contrast, CP Rail had 55 per cent of its 1992 total interswitching activity in zone 1, approximately the same share observed in the previous three years. The relatively lower volume of cars interswitched in this zone in 1992 was a result of reduced cars interswitched by CN in British Columbia. The increase in the reported number of cars interswitched in zone 3 in 1992 was attributable to an increase in CN interswitching activity for CP Rail in British Columbia related mainly to the record grain volume moved by CP Rail to Vancouver in 1992. However, under zone 3, the 11 per cent decline in the number of cars interswitched by CP Rail in 1992 was more than offset by the increase in CN interswitching activity.

Three-fifths of shippers surveyed reported having their facilities within interswitching limits.

Rail shippers from each of the eight provinces served by rail responded to survey questions regarding interswitching. Based on survey results, one-fifth of the shippers have facilities served by one railway and are beyond interswitching limits of any other railway; three-fifths of the shippers have facilities served by one railway and are within interswitching limits of another railway and the remaining shippers had facilities with direct access to two or more railways. The provinces with the lowest proportion of respondents having facilities within interswitching limits were Nova Scotia and New Brunswick, with an average of 40 per cent. Between 55 and 70 per cent of respondents from the remaining six provinces reported being within interswitching limits.

The reasons for using interswitching varied by province.

Shippers in each of the eight provinces served by rail had cars interswitched in 1992. Over one-half of shippers reported using interswitching for better terms and conditions, while 40 per cent of shippers reported having used interswitching primarily for better routing. Such results are very similar to those observed in 1991; however they varied by province. More shippers in Alberta, Saskatchewan, Ontario and Québec used interswitching primarily to achieve better terms and conditions, while more shippers in British Columbia, New Brunswick and Nova Scotia used interswitching "to obtain better routing" for their traffic. According to Manitoba shippers, better routing and better terms and conditions were equally important in their utilization of interswitching.

Relatively more large shippers than small used interswitching as a bargaining tool.

The primary reason for using interswitching varies by size of shipper. Sixty-one per cent of large shippers used interswitching primarily "to obtain better terms and conditions" for their rail movements. Conversely, 65 per cent of small shippers reported better routing as the number one reason for having used interswitching.

In 1992, shippers were also asked if they had used the possibility of interswitching as a bargaining tool in their negotiations with Canadian railways. Although approximately 30 per cent of responding shippers stated they used interswitching as a bargaining tool, the proportions varied by size of rail shipper. Only 17 per cent of small rail shippers reported using this tactic compared to 40 per cent of large rail shippers. In fact, almost one-half of all shippers using interswitching in their negotiations were large rail shippers.

Both CN and CP Rail have expressed concerns regarding the Agency's authority to extend interswitching beyond the 30 kilometre limit. Further, CN has argued that the prescription of maximum rates weakens a Canadian railway's position in negotiation with a U.S. rail carrier regarding interswitching, as no similar legislation exists in the U.S.

One decision regarding interswitching was rendered by the Agency in 1992. The case involved a situation whereby both CN and CP Rail had access to the AgPro facility in Saskatchewan, but the lines outside of AgPro did not connect with each other. CN and AgPro had an agreement which allowed CN to use AgPro facility trackage, for railway purposes, as its own. The Agency determined that an interchange did exist at AgPro under these circumstances and ordered CP Rail to provide interswitching services to this facility.

No attrition of traffic to U.S. railways through interswitching was found.

In 1992, the Agency also conducted a review of the *Railway Interswitching Regulations* established in 1988. Under the *NTA, 1987*, the Agency was required to review the regulations "not later than five years after the day on which the regulations are made". The Agency concluded from its review that the present rate structure was an appropriate reflection of the current policy set out in the *NTA, 1987* and, therefore, recommended no changes to the current regulations. During the course of the review of the interswitching regulations, the railways expressed the concern that the provision of interswitching was leading to a significant attrition of traffic to U.S. carriers. The Agency reviewed the number of cars interswitched before and after 1988 and found no evidence to substantiate this claim during its investigation.

Competitive Line Rates

A shipper located on one rail line and beyond interswitching limits can ask its local railway to establish a competitive line rate (CLR) for moving goods to a competing railway line. To do so, the shipper must already have reached an agreement with the competing railway before requesting a CLR from the local railway. The CLR applies from the

CSP Foods Ltd. Federal Court of Appeal

In May 1992, the Federal Court of Appeal upheld the Agency's 1989 decision relating to the process of establishing a CLR for CSP Foods Ltd. The issue was whether or not the Agency went beyond its jurisdiction in ordering CP Rail to provide CSP Foods Ltd. with individual rail freight rates for local traffic moving over a continuous route to a U.S. destination. CP Rail argued that it did not have to "issue a single-line tariff in respect of through traffic which is to move over a continuous route, portions of which are operated by two or more railway companies" and to force the railway to issue a rate for individual segments would "constitute an interference with the railways' right to freedom of contract".

The court determined that CSP Foods should be allowed access to other carriers involved in the movement of their products. This is in keeping with "the new balance between the rights of shippers and those of railways".

point of origin or destination to the nearest interchange with the competing railway. If parties cannot agree, the shipper can ask the Agency to set a CLR according to legislated guidelines.

Submissions made to NTARC indicated the strong support of shippers for the CLR provision, as it has given them negotiating power to obtain better rates and service conditions, and increased their transportation options. Shippers stated that CLRs have not directly led to attributable losses in market share or contributed to the deterioration of the financial results of the railways. Shippers also said that the CLR provision played a role in confidential contract negotiations. On the other hand, railway carriers expressed their opposition to the CLR provision because it does not take into consideration the effective intermodal competition, it is anti-competitive and it constitutes a regulated rate. The railways stated that the CLR provision was not needed since there are other provisions in the *NTA, 1987* such as confidential contracts and final offer arbitration. Also, Canadian railways indicated that CLRs were unfair because no reciprocal rights exist in the United States. A U.S. railroad (Burlington Northern Railroad) indicated to NTARC that it supported the idea of retaining the CLR provision in Canada.

The Agency has only been approached by two shippers (Alberta Gas Chemicals Limited and CSP Foods Limited) for the establishment of a CLR since 1988. Alberta Gas Chemicals Limited had one CLR in each of the four years between 1988 and 1991, and CSP Foods Limited had one CLR in 1989.

There was no application to the Agency for a CLR in 1992. All CLRs established so far by the Agency dealt with transborder activities and involved a U.S. line. Some have interpreted such results to mean that CN and CP Rail have avoided using the CLR provision to compete with each other, making the provision largely inoperative for traffic within Canada.

According to the Agency's 1992 shippers' survey results, only seven per cent of shippers undertook negotiations with connecting railways, with the objective of having a CLR established with a local railway. Shippers stating that they did undertake negotiations with a connecting carrier, indicated that the connecting carrier was American in 69 per cent of the cases. Again based on survey results, a significant proportion (64 per cent) of shippers undertaking negotiations were successful in reaching an agreement with the connecting carrier.

The 1992 shippers' survey results showed that proportionally, more large and medium-sized rail shippers attempted negotiations with connecting railways to establish a CLR. The majority of connecting carriers with whom large shippers undertook negotiations were Americans, while medium-sized rail shippers mostly undertook negotiations with Canadian railways.

No request for final offer arbitration was received by the Agency in 1992.

Competitive line rates were considered by shippers as the fourth most important factor in achieving competitive terms and conditions for rail services. However, those shippers who indicated they negotiated a CLR in 1992 ranked "competitive line rates" as the third most important factor in achieving competitive terms and conditions for rail services.

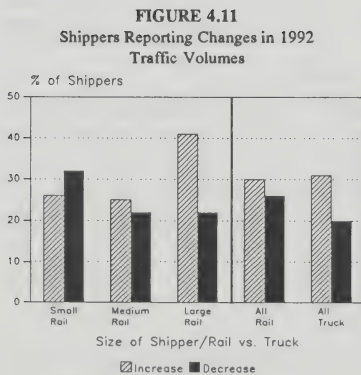
Dispute Resolution Provisions

Mediation, final offer arbitration and public investigations are the existing dispute resolution provisions which can be used in the event that shippers and carriers are unable to reach an agreement on the terms and conditions for the transportation of goods. Little use has been made of these provisions again in 1992, indicating that shippers and carriers have generally been able to reach agreements without the help of third parties. The appeal of the arbitrator's 1990 decision with regard to the Parrish and Heimbecker/CN arbitration case remained before the Federal Court at the end of 1992.

In spite of the fact that these provisions are rarely used, shippers have stated that they have used the final offer provision as a lever in rate negotiations. Captive shippers have also said that final offer arbitration is very important in their efforts to secure more competitive rail services.

A Summary of the Competitive Environment in Rail Services

Despite the weak performance of the economy in 1992, more shippers responding to the Agency's shippers' survey reported an increase than a decrease in traffic volumes relative to 1991. For each mode of transportation, the proportion of shippers reporting an increase in their 1992 traffic volumes surpassed the proportion reporting a decrease. However, 1992 was the first year since the Agency started its annual shippers' survey in 1988, that the number of rail shippers reporting an increase in rail traffic volumes was greater than the number of shippers reporting a decrease. As shown in Figure 4.11, the proportion varied by size of rail user. For instance, twice as many large rail users reported an increase than a decrease in traffic volumes in 1992, while small rail shippers reported more decreases than increases. Figure 4.11 also illustrates that the proportion of truck shippers reporting an increase in traffic volumes was marginally higher than the proportion observed for rail services.



In 1992, more shippers reported shifting a portion of their traffic from truck to rail (or rail intermodal), than reported shifting from rail to truck. Table 4.4 shows the number of shippers that reported shifting between truck and rail in 1991 and 1992. The larger number of shippers having shifted some of their traffic from truck to rail in 1992 was attributable to the increase in the number of respondents indicating that they shifted from truck to rail intermodal container services (COFC-

container-on-flat-car). This increase was indicative of shippers' response to the recent intermodal initiatives introduced by the railways to compete more effectively with trucking. In addition, fewer shippers indicated a shift from rail carload services to truck in 1992, than in 1991.

TABLE 4.4
Number of Shippers Reporting Shifts in Traffic Between Rail and Truck

Type of Traffic Shift		Year	
From	To	1991	1992
Truck	Rail Carload	43	46
Truck	Rail TOFC	37	37
Truck	Rail COFC	10	21
Rail Carload	Truck	47	38
Rail TOFC	Truck	11	20
Rail COFC	Truck	8	11

In the current economic climate, rate consideration is the primary reason for a modal shift.

When asked to indicate the primary reason for shifting traffic from one mode to another, three-quarters of the respondents that shifted from truck to rail stated rates as the primary reason. Slightly less than one-half of shippers that shifted from rail to truck did so primarily for rate considerations. Such results clearly indicate the bottom line consideration attached to modal choice decisions of shippers. Therefore, any carrier interested in diverting another mode's traffic, must introduce competitive rates to achieve such an objective. Despite the importance of rate considerations, the relative importance of market conditions in shippers' decisions to shift to truck services was observed: more than one-third of the shippers that shifted from rail to truck indicated doing so for market conditions, while only one-fifth of shippers that shifted from truck to rail reported market conditions as the primary reason.

One out of every four rail shippers reported that railways were more interested in competing for their traffic in 1992.

In 1992, 57 per cent of the survey respondents indicated that Canadian rail carriers were interested in competing with each other for their traffic, while only 18 per cent said the railways were not interested. Over 70 per cent of large shippers stated the railways were interested in competing, while 45 per cent of small shippers observed such a behaviour on the part of the railways. More than one-half of rail shippers indicated that the railways were just as interested in competing for their traffic in 1992 as they were in 1991; 25 per cent of rail shippers reported having noticed a greater interest on the part of the railways to compete for their traffic; while 20 per cent of rail shippers reported that the railways were less interested in competing for their traffic in 1992.

In their submissions to NTARC, CN and CP Rail referred to several issues related to competition that were raised in the Agency's 1991 Annual Review, such as:

The railways are concerned that their viability is threatened with the current level of competition resulting from the new legislation.

- the trucking mode not paying its full share of the cost of public highways;
- trucking benefitting from diesel taxes paid by the railways;
- the competitive access provisions of the legislation, said to have resulted in a significant drop in railway rates compared to inflation and to a loss of traffic to U.S. railways;
- the Agency guidelines on apportionment of costs for grade separation projects which, the railways said, favour road traffic;
- the onerous taxation regime imposed on Canadian railways compared to U.S. railways, primarily in the areas of income, property and fuel expenses and depreciation rates; and
- the complexity of the process to abandon or sell part of a railway line.

The railways expressed the view that the level of competition in the transportation marketplace introduced by the new legislation is a threat to the ongoing viability of the rail transportation industry.

Service

Less shippers in 1992 compared to 1991 reported a deterioration in rail services.

The number of shippers reporting an improvement in overall rail service declined marginally in 1992. Thirty-four per cent, a slight decrease from the previous year, responded that the service they received from the Canadian railways had improved. Fifty-eight per cent of shippers reported that their services remained the same as the year before and eight per cent said services had deteriorated. Similar to 1991, shippers in all size categories reported improvements and had a trend whereby the proportion reporting improvements increased directly with the size of rail user. Almost one-half of the large shippers, reported an improvement in rail services, while 65 per cent of those reporting a deterioration in services were small shippers. The highest proportion of shippers reporting a deterioration in rail services was observed in the food products and wholesale trade industries. Eighty-five per cent of the respondents who had confidential contracts in 1992 reported improved service.

In 1992, the domestic side of the economy failed to add significantly to growth. Under such an environment, railways have had to compress even further. Despite further reduction adjustments by the railways, survey results indicated fewer shippers reporting a deterioration in

Despite adjustments introduced by railways, shippers have not reported any increased deterioration in rail services.

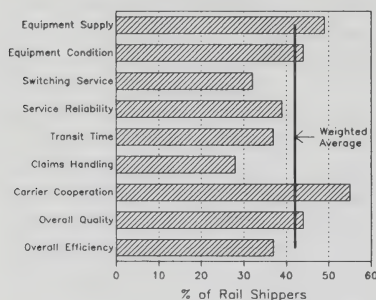
service in 1992 than in 1991. This indicated that the adjustments have not impacted on the overall quality of service offered. Railways have reduced their number of employees at a time of increasing expectations and structural adjustments aimed at improving productivity and competitiveness. Under such an environment, Canadian railways have had to become much more flexible and to compete both at the service and rate levels. For example, CN, in its submission to NTARC, commented that railways recognize their need to "create and consistently deliver services that create superior value for customers". To achieve this objective, CN pointed out initiatives undertaken such as double-stack domestic container service, new and expanded terminals and infrastructure improvements to facilitate inland transportation links to and from Canadian ports. According to the railways, these initiatives should translate into "more reliable and predictable service delivery, better on-time delivery performance, shipment tracking for critical customers, faster transit times, damage free handling, EDI and systems integration and total logistics solutions".

CP Rail has introduced similar initiatives to those identified by CN. In 1992, CP Rail received an award from ARDA, an organization consisting of individuals representing railways throughout North America, for its consolidation efforts with U.S. subsidiaries to form a "not only continental, but global" transportation system. ARDA expressed the opinion that CP Rail System was the only railway that truly reflected the current atmosphere involving the prospects of the North American Free Trade Agreement. In addition, CP Rail System was recognized with the "GM Mark of Excellence", in 1992. This award is based on five major components: cost control, quality improvement, service delivery, technology enhancements and leadership development. The railway received perfect scores in quality improvement, service delivery and technology enhancements, while attaining high scores in the two other areas.

For some traffic, railways and trucking firms are competitors. Competition between the two transportation sectors is not only at the level of rates but also in terms of the actual service offered to the users. Therefore a comparison of the assessment made by shippers of rail and trucking services is relevant. The proportion of shippers indicating an improvement in the overall level of truckload services received from for-hire trucking firms in 1992 was 30 per cent, seven per cent lower than the year before and four per cent lower than that reported for rail. The proportion of shippers reporting a deterioration in transportation services in 1992 was one-half of what it was in 1991 for both truckload and rail services.

The survey results clearly showed that rates and change in market conditions were more often the deciding factor for a modal change and very few shippers switched modes solely on service expectations.

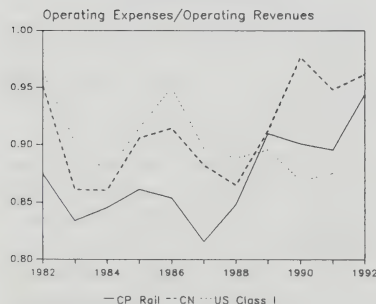
FIGURE 4.12
Shippers Reporting Good Service
by Service Factor



As in previous years, shippers were asked to evaluate a series of factors concerning the service they received from Canadian railways. Shippers were asked to assess nine service-related factors: equipment supply; equipment condition; switching service; service reliability; transit time; claims handling; carrier's cooperation; overall quality of service and; overall efficiency of service. In 1992, 41 per cent of all shippers indicated that service levels, were "good", 51 per cent said that service was "acceptable" and the remaining nine per cent considered service to be "poor". Figure 4.12 illustrates that "carrier cooperation" received the highest rating, followed by "equipment supply". While all shipper sizes reported a high rating for carrier cooperation, two-thirds of large rail shippers gave a "good" rating to this particular factor, compared to one-half for both medium and small rail users. The service factors with the lowest proportion of shippers reporting good service were "claims handling" and "switching service". Similar to "carrier cooperation", a relatively greater proportion of large rail shippers gave "switching service" a "good" rating than did either medium or small rail users. The rating of the nine service factors did not vary significantly from one industry to another. Yet a higher proportion of shippers from the paper and allied products and wood products industries rated "equipment conditions" highly.

Carrier Performance

FIGURE 4.13
Operating Profit Ratio

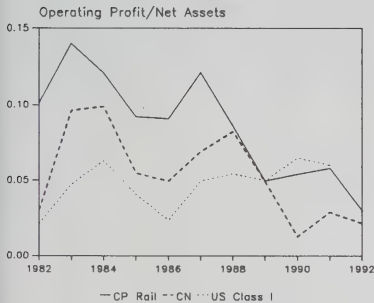


Excludes unusual charges.
1992 data not available for U.S. Class I Railroads.

The economic conditions prevailing in North America in 1992 have had an impact on the financial performance of Canada's two major railways. Compared to 1991 results, CP Rail faced an eight per cent decline in its operating revenues in 1992, while CN experienced a one per cent reduction in its operating revenues. In 1992, CP Rail's operating expenses increased by 3.5 per cent and by 25 per cent for CN. Operating expenses in 1992 included unusual charges recognized in the statement of income. The unusual charges, which are non-recurring, included the future cost of workforce reduction and line abandonment. For CP Rail, these unusual charges accounted for more than 12 per cent of operating expenses and for 20 per cent of CN's operating expenses. If one was to exclude such unusual charges, the 1992 operating expenses would have been reduced by three per cent for CP Rail and remained stable for CN.

Since 1987, even after eliminating the unusual charges, CN and CP Rail operating ratios (i.e., operating expenses over operating revenues) have increased significantly (Figure 4.13). This ratio shows the proportion of revenues generated by day-to-day operations available for reinvestment in the company's assets and/or distribution to shareholders. As a result of this increase in their operating ratios, the return on net assets of the two largest Canadian railways declined over the 1987 to 1992 period, from 12 per cent in 1987 to less than three per cent in 1992 for CP Rail and from seven per cent to two per cent for CN (Figure 4.14). The

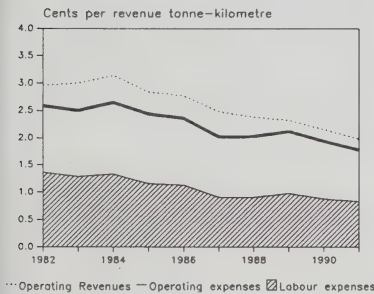
FIGURE 4.14
Return on Assets



Excludes unusual charges.
1992 data not available for U.S. Class I Railroads.
CP Rail's assets for 1992 are estimated.

FIGURE 4.15
CP Rail

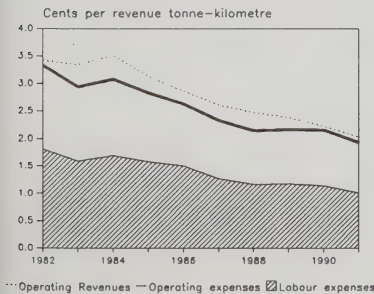
Operating Revenues and Expenses



Constant Canadian dollars.
Excludes unusual charges.

FIGURE 4.16
CN

Operating Revenues and Expenses



Constant Canadian dollars.
Excludes unusual charges.

return on assets represents the operating profit generated by each dollar invested in the companies.

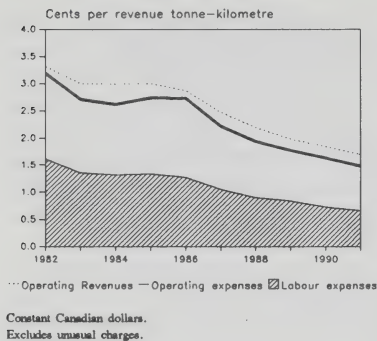
In recent years, while Canadian railways' operating ratios were deteriorating, the same ratios of combined U.S. Class I railways were, in relative terms, improving and have exceeded those of Canada's two major railways since 1990. In the U.S., railways have been able to match revenue reductions with proportional reductions of expenses. Meanwhile, in Canada, recent cost reduction initiatives of the railways have yet to translate into improved financial results because of upfront extraordinary costs attached to labour reduction exercises (Figures 4.15, 4.16, and 4.17).

Labour is an important element of railways' cost structure. Labour costs (wages and salaries plus payroll taxes and fringe benefits) make up about 50 per cent of CN's and CP Rail's total operating expenses. By 1991, U.S. Class I railways had reduced their work force to less than 55 per cent of their 1982 level of employment. For CN and CP Rail, their 1991 level of employment represented 62 and 71 per cent of their 1982 labour force, respectively. On a per employee basis, railway labour costs are 20 per cent lower in Canada than in the U.S. Over the period 1982 to 1991, U.S. railways have reduced their labour expenses, (in constant dollar terms and including payroll taxes and fringe benefits) by 47 per cent, compared to a reduction of less than 30 per cent by Canadian railways. Comparing revenues generated per dollar of labour expenses in 1991 (measured in Canadian dollars), CN and CP Rail produced \$2.00 and \$2.38 of revenues respectively for each dollar of labour expenses, compared to \$2.58 by U.S. railways indicating higher labour productivity levels in the U.S.

Given the North Americanization of Canadian railways' operations, financial results can also be examined for their whole North American system. For instance, CP Rail System, which consists of CP Rail, Soo Line and the Delaware and Hudson Railway Company, generated 4.7 per cent less revenues in 1992 than in 1991. CP Rail System reported an operating loss of \$343 million in 1992 compared to operating profits of \$24.5 million in 1991 and \$316.1 million in 1990. CP Rail System's 1992 financial results included unusual charges of \$453.6 million. The unusual charges consisted of \$270.2 million for the introduction of the two-men crew and \$183.4 million for proposed abandonment of lines east of Sherbrooke. Unusual charges of \$250.9 million for the closure of the Angus shop were reported in 1991. If these unusual charges had been excluded, CP Rail System would have had operating profits of \$110.6 million in 1992 and \$275.4 million in 1991.

The operating revenues of CN North America, which are comprised of CN railway activity in Canada and its three U.S. subsidiaries, remained the same in 1992 compared to 1991, while operating expenses jumped by 25 per cent. CN North America reported an operating loss of \$853.9 million in 1992, compared to operating profits of \$116.6 million in 1991

FIGURE 4.17
U.S. Class 1 Railroad
Operating Revenues and Expenses



In 1992, only one rail line conveyance was approved.

Both railways applied to abandon less than four per cent of their rail network again in 1992.

and \$62 million in 1990. CN North America's 1992 operating expenses included the future cost of a program to improve productivity through workforce reductions amounting to \$887.4 million and a change in accounting policy to accrue certain post-retirement benefits amounting to \$63.6 million. Without these unusual charges, CN North America would have posted an operating profit of \$97.1 million in 1992.

Network Rationalization

Abandonment Activities

The Agency's jurisdiction in the area of rail rationalization includes rail line abandonment applications and reconsiderations, track determinations, conveyance of railway lines, and station removals. As well, interested parties can request the Agency for a review, to vary or otherwise alter an order previously issued.

The railways must file a Notice of Intent to apply for abandonment 90 days before filing any new application to the Agency. In cases of previous applications, where the Agency ordered the operation of a line continued, these must be reconsidered every three years following receipt of an application. To obtain approval to have a rail line conveyed to another company, the railway presently owning the line must file a written notice of the agreement to convey the line.

Early in 1992, the Agency approved only one application for a rail line conveyance which involved an agreement between two wholly-owned subsidiaries of CP Rail - the Napierville Junction Railway Company (NJR) and the Atlantic North West Railway Company (A&NW). The agreement called for the conveyance by lease to the A&NW of 27.12 miles of the NJR between Delson and the international border in Québec.

Approximately 15,000 miles of branchline trackage, which includes most of the rail network in the Prairie provinces, has been protected from abandonment by legislation until the year 2000. For all other branchlines, between 1988 and 1992, each railway was limited to abandon no more than four per cent of its total route mileage per year. In each of these five years, the railways' applications for abandonment were below the four per cent limit. Since January 1, 1993, the four per cent ceiling no longer applies.

For 1992, the total route mileage for each railway was calculated from the total route mileage supplied by the carrier as of December 31, 1987, with adjustments made as a result of abandonments, conveyances and new line construction in the years 1988, 1989, 1990 and 1991. The authorized four per cent limit for each railway for 1992 was determined by dividing the number of miles ordered abandoned effective in 1992, by the total route mileage of the railway as of January 1, 1992.

Excluded from the four per cent rule is the abandonment of lines forming part of the protected network in the Prairie provinces. In 1992, CN applied to abandon 2.05 per cent of its total trackage and CP Rail 1.03 per cent. In total, there were 23 active abandonment cases before the Agency in 1992. This total was made of several requests for review of previous Orders, new applications filed in 1992, applications carried over from previous years and applications requiring reconsideration.

The Agency ordered CN to abandon 0.57 per cent of its total rail network effective in 1992. An additional 0.04 per cent was ordered abandoned, with the effective date of abandonment set in 1993 to give VIA Rail or affected shippers time to adjust to the new situation. Two cases totalling 0.14 per cent were ordered retained. Another five cases, representing 0.82 per cent, were carried over into 1993 for a variety of reasons, which included cases whose six month legislative deadline were beyond December 31, 1992. In two of these cases, the Agency issued an Order and Decision in early 1993 and in the three other cases, Orders and Decisions are expected in the first half of the year. CN was also allowed to abandon 0.48 per cent of its protected network in the Prairie provinces, not subject to the four per cent rule.

In 1992, CP Rail had 1.03 per cent of its total network before the Agency for abandonment. The Agency allowed CP Rail to abandon 1.57 per cent of its network effective in 1992 and 0.18 per cent effective in 1993. In addition, 0.3 per cent of CP Rail's protected network was allowed to be abandoned. For CP Rail, a greater percentage of mileage was ordered abandoned than was applied for in 1992. This can be explained by the fact that cases which had been stayed by the Agency or which had been appealed to the Federal Court were resolved in 1992. For example, several Agency Decisions regarding lines in New Brunswick ordered abandoned were appealed, but the Court ruled that these lines could be abandoned as ordered in the original Agency Decision. Detailed abandonment activities are provided in Appendices D.1 through D.5.

Decisions on all cases carried forward from 1991 were rendered in 1992. The Agency issued 14 Orders for the 24 active abandonment cases during 1992 (See Appendix D.4). The 11 remaining active cases at the end of the year involved abandonment orders from previous years.

CN and CP Rail intend to abandon almost 1,400 miles in 1993.

With regard to abandonment plans for 1993, CN said that it intends to file 14 abandonment applications covering 612 miles; CP Rail stated that it anticipates filing 30 applications covering 785 miles. The total of these two mileage figures, 1,397 miles, represents about four per cent of CN and CP Rail's combined total rail network in Canada, which is approximately 34,000 miles. (See Appendix D.5)

The Agency canvassed other railway companies as to their plans for rail line abandonment in 1993; however, no plans were submitted.

Royal Commission on National Passenger Transportation

As the mandate of the Royal Commission was that of passenger transportation, most recommendations with regard to rail dealt with VIA Rail. The Royal Commission recommended that:

The Royal Commission recommended the phase-out of subsidies to VIA Rail.

- the federal government should pass legislation to give VIA Rail a corporate mandate that would allow it to operate on a commercial basis; such a mandate would give VIA Rail's management decision-making power in relation to investment, route selection, service levels and pricing;
- VIA Rail's operating subsidy, which was \$368 million in 1991, should be controlled by a legislated schedule of payments that would see the subsidy decline to zero in 10 years;
- VIA Rail should be free to compete for services such as operating commuter services and transporting mail; and
- VIA Rail should be required to file with the federal government and to publish annual operating plans and financial reports, which include costs and revenues related to individual routes.

With regard to rail line abandonment, it was recommended that:

- there should no longer be a limit applied to the amount of track a railway company is allowed to abandon; and
- the protection of the potential value of railway rights-of-way, as future transportation corridors, should be assured by a more formal process.

In applying the user-pay principle to the road network, the Royal Commission's research suggested that heavy axle-weight trucks currently pay less than their total cost of road wear. As a result, it was recommended that weight-distance taxes for trucks be instituted. It was felt that such charges would achieve more equal treatment of trucks and railways in the movement of freight, as rail freight generally covers its full cost.

The Royal Commission saw the principle of competition particularly difficult to achieve in rail. It is hard to have competitive access to rail infrastructure, because it is usually owned by the operator of the trains. Such an operator could be expected to restrict other potential operators from having access to its track.

The possibility of separation of track ownership and carrier operations was considered by the Royal Commission. The Royal Commission

suggested that the government could consider this option if current competitive access provisions to rail infrastructure were found to be insufficient. Citing the case of the Swedish railway where this had been attempted, the Royal Commission noted it would be feasible, but difficult to do so in Canada. It further suggested that if the government took this course of action, the best approach would be a step-by-step introduction of change.

National Transportation Act Review Commission

NTARC reported that rail shippers were generally pleased with the NTA, 1987.

NTARC indicated that rail shippers were generally content with the workings of the legislation. They were unanimous in stating that the use of confidential contracts acted as a mechanism for agreeing on freight rates. Data secured from the Agency indicated that most of the shippers doing business with the railways used confidential contracts. Their principal objective in negotiating confidential contracts had been to secure rate concessions and guarantees against rate escalation. NTARC also said that shippers supported the competitive access provisions of the Act, namely: interswitching, final offer arbitration and competitive line rates. Although they were well perceived as important bargaining tools, little use was made of these provisions. In general, shippers wanted to retain the interswitching provisions; however, some shippers suggested modifications, such as a redefinition of an "interchange" and the requirement to have Agency approval for the abandonment of track providing access to interchanges. Final offer arbitration and competitive line rates were seen by shippers, particularly captive shippers, as an asset in their negotiations with the railways. In their submissions to NTARC, carriers expressed concerns about the final offer arbitration process. The carriers claimed that this provision should not be applicable when shippers have access to competitive transportation services and should not be used to impose unfair rates. CN stated that "private dispute mechanisms should be left to the choice of the disputing parties", keeping the philosophy of the competitive marketplace in mind. Most shippers' submissions suggested that CLRs had given captive shippers substantially increased powers during negotiations. Finally, shippers noted the need for railways to have greater flexibility in cost management; in particular they should be given greater latitude when it comes to abandoning unproductive lines, transferring operations or creating short line operations.

CN and CP Rail both made submissions to NTARC. While each company had different perspectives on several issues, there were common areas of concern:

- the need for a "truly national" transportation policy coordinating transportation policy among the federal and provincial levels of

government and keeping the goal of improved competitiveness in mind;

- the heavy tax burden imposed by federal and provincial governments;
- the unfair advantage of highway carriers not having to provide their own infrastructure as do the railways;
- the heavy regulatory burden imposed on railways, especially in the area of service and plant abandonment;
- several regulatory reform provisions are more favourable to shippers and should be amended to make them more balanced.

NTARC recognized that the railway industry is financially vulnerable.

NTARC came to the general conclusion that the provisions of the legislation had indeed benefitted the shippers they were intended to serve, but that a challenge lies in "an agenda for the rail sector which allows its transition to a competitive, healthy industry serving Canada's commodities and manufacturing industries". Faced with a decline in revenues since 1985, the railways' rigid cost structures have made the industry quite vulnerable. NTARC recognized that "rapid adjustments in both internally and externally generated costs" will be required, identifying more specifically an excess of track and facilities and the difficulties to abandon. NTARC noted, "the amount of needless infrastructure is staggering".

In keeping with the goal of creating an environment in which the railways could adjust the costs of their operations, NTARC recommended that:

- the process for rail rationalization be liberalized: railways should not have to demonstrate financial loss or absence of public need and procedures generally should be streamlined;
- the rationalization of the Prairie branchline structure should not be delayed;
- procedural obstacles should be removed to facilitate the creation of short line railways as a way of enhancing competition;
- the government should encourage CN and CP Rail in joint rail plant usage initiatives;
- the Minister of Transport should commission a comprehensive study regarding the feasibility of separating railway operations from the ownership and maintenance of a rail plant; and finally,
- the government should initiate measures necessary to privatize CN, as it is no longer performing a public policy mandate.

Recommendations to the competitive access provisions were made.

With regard to regulatory reforms, NTARC recommended that:

- copies of confidential contracts should no longer have to be filed with the Agency, but carriers should nevertheless be required to keep copies for six years;
- competitive line rates should be retained with a number of modifications, notably that the provisions should be amended to require that "the Agency establish CLRs that are commercially fair and reasonable" (i.e., CLRs that match the revenue that the local carrier would have achieved under intramodal competition);
- final offer arbitration should be retained with modifications, notably that the alternative investigation procedure should be repealed and in its place be substituted "a summary process in which a carrier has the responsibility of demonstrating to the Agency that effective competition exists"; and
- compensatory rate provisions should be abolished.

NTARC also looked at the area of rail labour, drawing heavily on a labour productivity study undertaken for the Commission. It was noted that compensation in the rail industry was much higher than in the trucking industry, with average weekly wages being 49 per cent higher. Rail labour productivity in Canada is lower than in the United States. According to the study, in 1991 CP Rail only achieved 60 per cent of the productivity per employee of that achieved by employees of the seven leading U.S. railroads; CN achieved 56 per cent. Furthermore, NTARC noted there has been a major cost to downsizing, which is the result of an employment security package the railways negotiated in 1985. NTARC commented, "this situation should not have been allowed to develop".

Rail Passenger Matters Dealt with by the Agency

Voyageur Colonial Ltd. filed an application concerning VIA Rail's off-peak fares.

The Agency is responsible for consideration of complaints with respect to fares or levels of rail passengers services.

In November 1992, Voyageur Colonial Limited filed an application with the Agency for leave to appeal the terms and conditions of VIA Rail's Off-Peak Fares in the Québec City-Windsor corridor on the grounds that these fares were prejudicial to the public interest.

In 1991, the Honourable Herb Gray and Mr. Paul Langan applied to the Agency for leave to appeal the fares, terms and conditions of VIA Rail's Canrailpass on the grounds that the conditions of availability of the pass were prejudicial to the public interest. The Agency investigated this

allegation and VIA Rail was ordered in 1992 to remove the prejudicial features from this particular tariff.

The *Railway Act* requires that applications for discontinuance of uneconomic passenger-train service that were denied be reconsidered by the Agency every five years. In this regard, the Algoma Central Railway's (ACR) application to discontinue passenger service between Sault Ste. Marie and Hearst, Ontario, was reviewed in 1992 and ACR was ordered to continue the service. The Agency started to review CN's application to discontinue the passenger service operated jointly with Ontario Northland Railway between Toronto and North Bay, Ontario, as well as an application from the Québec North Shore and Labrador Railway. With regard to the Ontario Northland Railway case, a public hearing is scheduled for the second quarter of 1993.

TRUCKING SERVICES

Highlights of 1992

Shippers' Perspective

The fierce competition of the last few years showed signs of stabilizing while freight volumes increased in some industry sectors and reported rate increases declined. Shippers reported improvements in carrier's cooperation, service frequency and reliability while claims handling continued to cause concern.

Meeting New Challenges

Carriers continued to rationalize operations through mergers and consolidations and market withdrawals. Bankruptcies declined and the financial performance of the major carriers showed a modest improvement.

Industry Concerns

Lack of uniformity of provincial regulations continued to frustrate both carriers and shippers. The new entry test was regarded by some carriers as insufficient to sustain a stable industry. Infrastructure costs were in the forefront as governments struggle with inadequate highway systems and diminishing financial resources.

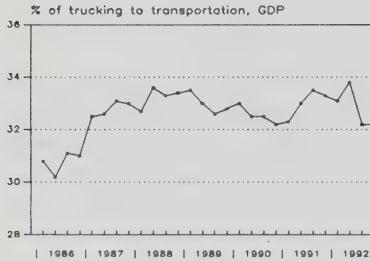
Special Government Reports

The Royal Commission on National Passenger Transportation strongly endorsed the user pay concept for travel. Implications for truck transportation include an appropriate division of highway investment costs by different classes of users, and the potential for use of tolls and weight-distance taxes.

The NTA Review Commission expressed concern over the failure to fully implement the National Safety Code and the lack of uniformity in trucking operating standards. The Commission also supported the user-pay concept and favoured opportunities for more flexible infrastructure investments, including involvement of the private sector.

Trucking in the Canadian Transportation Industry

FIGURE 5.1
Trucking's Role in Transportation
1986 - 1992



Transportation accounts for 3.4 per cent of all goods and services produced in the Canadian economy. The contribution of the trucking industry to the gross domestic product (GDP) has been increasing in recent years (Figure 5.1) while the contribution of all transportation sectors has been declining. Trucking plays a key role in Canada-U.S. trade flows. In terms of value, over 75 per cent of Canada's imports from the U.S. and over 60 per cent of exports to the U.S., move by truck.

Statistics Canada reports that during the fourth quarter of 1992, there were 49 large carriers earning \$25 million or more annually, 34 of which were primarily general freight carriers. The remaining 15 large carriers were involved predominantly in the specialized freight business. There were 1,208 for-hire trucking carriers earning \$1 million or more annually, of which 555 were general freight carriers. Ontario and Québec had the largest number of carriers based in their regions (42 per cent of the industry's total) and together they generated 53 per cent of all trucking freight revenues. Only 16 per cent of Canadian domiciled carriers operated in the U.S. and their activities accounted for 11 per cent of the industry's total revenues.

Government Initiatives Affecting Trucking

Regulatory Environment

Test for Entry

The "reverse onus" test expired and was replaced by a safety fitness test.

The *Motor Vehicle Transport Act (MVTA, 1987)* permitted a third party to appeal to provincial and territorial regulatory authorities to deny an application for an extra-provincial truck licence if it could be demonstrated that it "would likely be detrimental to the public interest". Previous legislation had placed the responsibility on the applicant to prove public convenience and necessity (PCN) in order to obtain a licence. As a result, the entry test introduced by the *MVTA, 1987* was often referred to as the "reverse onus" test.

The *MVTA, 1987* gives the Minister authority to make regulations regarding, among other things, the fitness of an applicant to hold a licence. Included in the fitness regulations are two entry criteria: a satisfactory safety rating and minimum insurance requirements. These entry criteria were intended to achieve the "elimination of operational restrictions on carriers" without imposing total economic deregulation. With respect to safety regulations, the interpretation and implementation of the National Safety Code have varied among jurisdictions.

The *MVTA, 1987* included a provision for the reverse onus test to expire on December 31, 1992. In its place, the Council of Ministers Responsible for Transportation and Highway Safety has agreed to implement a national safety fitness test.

The Safety Fitness Test

To ensure the uniform application of a recommended fitness test, the federal Minister of Transport requested that a review of current safety and fitness procedures, as practised by the various jurisdictions, be conducted by the Canadian Council of Motor Transport Administrators (CCMTA). A Task Force on Fitness, chaired by Transport Canada, was established and consultations were held with government and industry representatives.

Although no jurisdiction currently demands proof of financial viability, this was an issue of some concern which was not covered by the Review exercise but referred to the NTA Review Commission. Many in the industry were hoping that tougher entry rules would alleviate the current overcapacity problem.

The safety fitness test recommended by the task force replaces the twelve existing interpretations of the legislation with a single, national entry test, based on the following three principles:

- to meet safety fitness requirements under the laws of Canada and [those of the applicable jurisdiction];
- to comply with highway safety and dangerous goods legislation; and
- to know required safety standards, practices and procedures in each jurisdiction in which the applicant will operate.

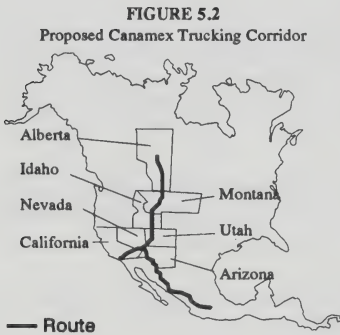
Applicants for extra-provincial trucking authorities are also required to answer questions concerning driver selection, driver performance, vehicle safety, operational safety, and safety compliance. The present carrier audit system will continue to be the mechanism that ensures conformity.

The new safety fitness test applies to all holders of extra-provincial licences, including owner-operators. Inclusion of private carriers will be phased in over time. Licences in effect on January 1, 1993 will remain in force. Existing licence holders will continue their operations without restriction. New entrants will be required to meet the entry standards to obtain an extra-provincial operating authority. No action is required by provincial authorities to cancel the reverse onus test.

Implementation

The intent was that all provinces and territories would apply the entry test in a similar manner, the safety fitness national standard were accepted as a minimum only, a situation that does not prevent any

Lack of uniformity of vehicle weights and dimensions continues to frustrate the industry.



jurisdiction from implementing additional requirements. Therefore, the national standard will represent what is common among jurisdictions rather than a limit of what is included in an entry test.

Vehicle Weights and Dimensions

Lack of uniformity of provincial vehicle standards, especially as they relate to weights and dimensions (lengths) has long been a major issue to extra-provincial truck activities. In 1991, a Memorandum of Understanding Respecting a Federal-Provincial-Territorial Agreement on Weights and Dimensions was signed which established minimum standards across the country. This has not, however, addressed emerging technologies. A number of recent initiatives have drawn particular attention to the matter.

In 1992, the Ontario Ministry of Transportation launched a review of the province's commercial vehicle weight laws with the following objectives in mind: making them more consistent with "neighbouring" jurisdictions, including the U.S.; simplifying the rules; influencing vehicle design and improving competitiveness. Consultations are still on-going and a report is expected by September, 1993.

The Province of Alberta, which has less restrictive commercial vehicle standards than many other jurisdictions, has initiated negotiations with six U.S. States from Montana to California, and with Mexico, to reach an agreement whereby one permit would authorize travel along a trade corridor (Figure 5.2) (called "CANAMEX") using the preferred double trailer configuration known as the "Rocky Mountain Double".

In September 1992, the Maritime Premiers signed a Memorandum of Understanding aimed at establishing uniformity of regulations governing motor vehicle transport, including weights and dimensions, in each of the three provinces. Each province intends to pass its own legislation to enact the reforms by September of 1993.

The problems of harmonization of vehicle standards and weights and dimensions have been raised between Canada, the U.S. and Mexico at negotiations concerning the North American Free Trade Agreement (NAFTA). In Canada, a working group comprised of government and industry representatives has established a list of priority land transport standard issues to be presented as a Canadian position at the NAFTA negotiations.

The North American Free Trade Agreement - NAFTA

Pending approvals from governments in Canada, the United States, and Mexico, the NAFTA will take effect on January 1, 1994, creating a free trade area which includes 360 million people and an output valued at US\$6 trillion annually.

The intent of the Agreement, with respect to transportation, is to give American and Canadian carriers access to limited routes within Mexico in three years with the objective of providing easier shipment of goods by land in North America. Mexico would allow Canadian and American motor carriers to make cross-border deliveries to pick up and drop off international cargo in the Mexican border states of Chihuahua, Coahuila, Nuevo Leon, and Sonora. The U.S. would allow Mexican motor carriers similar access to California, Arizona, New Mexico and Texas. Currently, southbound foreign truckers have to drop their trailers at the border, where they are either hauled into Mexico by Mexican drivers, or the load is transferred to Mexican trailers. Operations to all points in Mexico would be allowed six years after the signing of the Agreement.

NAFTA Implementation Schedule for Trucking

1st Year	After 3 Years	After 6 Years	After 7 Years	After 10 Years
Access to limited routes within Mexico for American and Canadian carriers	Operations into Mexican border states authorized	Operations to all of Mexico authorized		
	Foreign investment in Mexican trucking companies providing international cargo service authorized up to 49 per cent		Foreign investment in Mexican trucking companies providing international service authorized up to 51 per cent	Foreign investment in Mexican trucking companies providing international service authorized up to 100 per cent
		Compatibility of standards with respect to motor carrier operations		

Up to 49 per cent of foreign investment in Mexican trucking companies providing international cargo service would be authorized three years after the signing of the Agreement, up to 51 per cent seven years after, and up to 100 per cent ten years after the signing. This gradual phasing-out of Mexican investment restrictions should give Canadian carriers time to develop long-range business plans, such as expanding fleets and routes across the continent.

The three countries would endeavour to make compatible, over a period of six years, their standards related to motor carrier operations:

- vehicles, including equipment such as tires and brakes, weights and dimensions, maintenance and repair and certain aspects of emission levels;

- non-medical testing and licensing of truck drivers;
- medical standards for truck drivers;
- standards relating to the transportation of dangerous goods; and
- road signs and supervision of motor carrier safety compliance.

In 1992, Challenger Motor Freight was one of the few Canadian trucking company that offered service into Mexico, a market which represents about 10 per cent of the company's business. Other Canadian carriers have interline arrangements to Mexico, although further involvement is still being treated cautiously.

The Canadian industry is concerned that U.S. truckers who already have access to Mexican border states will have three years to build a North American network, whereas Canadians will be forced to delay access and face the perilous task of trying to catch up to their efficient and financially strong U.S. competitors.

Owner-Operator Cooperatives

Following the 1990 and 1991 truck blockades, five owner-operator associations joined together to form the Canadian Coalition of owner-operator associations to represent their concerns to the federal government.

A federal Task Force on Trucking Issues (comprised of representatives of large carriers, affiliated owner-operators, unions and shippers) was created to recommend possible programs that would aid the industry as a whole. The Task Force met five times between August 1990 and December 1991, and in July 1991 was asked to recommend short-term transitional assistance programs to help offset the impact of the recession on the industry. On December 6, 1991, the Minister announced a package of transportation measures which included \$2.7 million for the establishment of a buyers' cooperative.

In January 1992, the Minister of Transport was presented with two separate proposals for the cooperative; one emanating from the Canadian Coalition of Owner-Operator Associations, and the other from a group consisting of the main trade unions with trucker members, the Western Owner-Operators' Association (WOOA) and the Canadian Dump Truck Federation. Both groups were asked to meet the requirement for open membership and to provide a complete business plan.

Following unsuccessful attempts by the two groups to unite, the Minister awarded \$1.8 million to the Coalition proposal and \$0.9 million to the WOOA/Union proposal on May 4, 1992.

The federal one-time funding will be used to set up offices and offset initial administrative costs. It will also be used to acquire the assistance of business management experts who will help establish the structure of

the organization. The owner-operator participants will manage both the formation and ongoing administration of the cooperative.

The cooperatives also provide a focal point for the provision of benefits and services to all owner-operators and promote a self-help approach, sustained by user fees. Membership is open to all owner-operators, regardless of region or affiliation.

The main objective of the cooperatives is to improve the financial viability of the members by:

- reducing operating costs by negotiating discounts with suppliers;
- providing information assistance and marketing training;
- providing legal information and taxation and accounting management;
- improving the status of owner-operators through a stronger presence in relation to suppliers, carriers and the public; and
- improving legislation and regulations.

The Canadian Cooperative of Independent Truck Owner-Operators (CCITOO), originating from the proposal of the Coalition, was federally incorporated in July 1992 and started to operate in September 1992. It has 464 members (mostly from Ontario and Québec) and has already negotiated discounts for members (ranging from eight to 15 per cent) from Imperial Oil (ESSO), General Tire, Royal Insurance, accounting firms, Compu-Trux (a firm selling on-board computers and heaters). It is currently negotiating with truck manufacturers, preferably from Canada (such as Navistar). One share in the cooperative costs \$100 and annual fees are also \$100. The cooperative has an office in each of Canada's five major regions, and its head office is in Lachine, Québec.

The other cooperative, the Canadian Owner-Operators Cooperative, was federally incorporated in the fall of 1992 and was opened officially on March 11, 1993. The unions will have representation on the Board of Directors. The cooperative has five regional representatives, and their head office is in Ottawa, Ontario. It anticipates negotiating discounts with truck manufacturers, fuel companies, tire and parts manufacturers and insurance companies. Its regular membership costs \$100, and these membership fees are expected to be its only source of revenue.

Transport (Load) Broker / Owner-Operator Licensing

The 1990 and 1991 truck blockades also led to the creation of a CCMTA Task Force to study load broker and owner-operator licensing and owner-operator contract standards.

With respect to load brokers, the issues raised were:

- terms and conditions of registration;
- disclosure of information;
- trust funds and accounts;

CCMTA endorsed model legislation to licence owner-operators and load brokers.

- liability;
- bond requirements.

A model *Motor Vehicle Transport Brokers Act and Regulations*, intended for use in jurisdictions where a problem exists, was accepted by Transport Ministers in September 1992, with the caveat that enactment of the trust account requirements would be subject to assessment by the individual jurisdictions.

To date, legislation has been passed in Ontario, effective October 1, 1992, which includes requirements for a surety bond and trust account. Licensing of load brokers is under consideration in British Columbia. The legislation, when passed, will include elements of the CCMTA recommendations as well as the ICC (U.S. Interstate Commerce Commission) regulations.

In order to permit greater independence and flexibility for owner-operators, model legislation was drafted to permit an owner-operator to conduct business under the operating licence of a carrier using a vehicle registered in his or her own name. This model legislation was recommended for use in jurisdictions where registration for owner-operators is not currently feasible.

Finally, model owner-operator contract standards were prepared that include terms and conditions, obligations by both parties, method of compensation and holdbacks, all of which were to promote good business practices and foster the stability and economic welfare of that segment of the trucking industry.

Government Investment in Infrastructure

Federal Programs

The Minister of Finance announced investments in transportation infrastructure.

The federal government recognizes that significant capital investment in highway infrastructure will be required over the next decade. Accordingly, the concept of a National Highway System was introduced, subject to provincial approval, including appropriate funding allocation. This long term, multi-billion dollar strategy is still being negotiated through the Council of Ministers Responsible for Transportation and Highway Safety (CMRTHS). The proposal would designate, as the National Highway System, a network of highways linking capital cities and major centres across Canada - 25,000 kilometres of designated highway identified to be of national importance by studies done by the CMRTHS. (Figure 5.3)

Pending resolution of the National Highway System, the Minister of Finance presented an Economic and Fiscal Statement on December 2, 1992, which included significant investments in public transportation infrastructure. A total of \$200 million, to be cost shared with the provinces of Nova Scotia and New Brunswick, will permit an immediate

FIGURE 5.3
Proposed National Highway System



start on the construction of the "Atlantic Expressway". Funding for the Atlantic Expressway will enable Nova Scotia to continue current construction projects, such as "twinning" of existing major highways in the province based on the recommendations of the National Highway System study, as well as adding new sections of highway in areas such as Cape Breton.

In New Brunswick, new federal funding will be used for "twinning" of existing highways and construction of by-passes, all in conformity with the National Highway System. Approximately 40 per cent of the existing Trans Canada Highway through New Brunswick will form part of the Atlantic Expressway.

In the western provinces, cost-sharing agreements have been signed with the governments of Manitoba, Saskatchewan and Alberta. A total of \$70 million will be spent in Manitoba to upgrade the Trans-Canada Highway, widen the Yellowhead Trans-Canada Highway and upgrade the Winnipeg Perimeter Highway. In Saskatchewan, \$70 million has been earmarked to upgrade and repave a number of major highways, including the Trans-Canada, and for twinning of other major highways. A total of \$60 million will be spent in Alberta to twin sections of the Trans-Canada and other major highways and for upgrades of other highways.

In addition, the government is looking for ways in which to involve private sector investment such as the fixed link to Prince Edward Island. The total project is estimated to be worth \$800-900 million and will generate up to 3,500 person-years of employment over a five year construction period.

Ontario's Capital Investment Plan

On February 9, 1993 the Premier of Ontario announced a \$6 billion capital investment plan involving both municipal and private sector partners over the next 10 years, including building new highways.

Transportation projects will be managed by the Transportation Capital Corporation, a crown corporation which will finance and build new public transit and provincial highway projects. This concept is in line with recommendations made by the Royal Commission on National Passenger Transportation to make use of innovative financing methods, such as private investment or user tolls.

Over \$200 million has been committed for 1993 to build or improve highways in Ontario. At least one new section of road, Highway 407, will be a toll road when it opens in 1996. Funds collected through the toll will be dedicated to paying the capital cost of the road and will end when the cost of construction is paid. This project has the support of groups such as the Better Roads Coalition and the Ontario Trucking Association.

Industry Structure

Market Entry

There was a slight drop in applications for extra-provincial authorities in 1992.

FIGURE 5.4
Domicile of Carriers
Applying for Licences in 1992

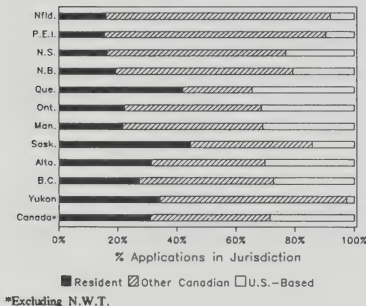


TABLE 5.1
Number of Applications for Licence Authorities by
Jurisdiction and Domicile of Applicants, 1991-1992

Jurisdiction	Domicile of Applicants							
	Residents		Other Canadian Jurisdiction		U.S.		Total	
	1991	1992	1991	1992	1991	1992	1991	1992
Nfld.	12	8	46	38	9	4	67	50
P.E.I.	18	13	77	63	7	8	102	84
N.S.	42	22	159	81	39	31	240	134
N.B.	46	54	206	168	71	58	323	280
Québec	658	662	475	370	320	546	1,453	1,578
Ontario	447	312	622	646	409	440	1,478	1,398
Manitoba	51	77	215	169	90	110	356	356
Sask.	181	260	268	239	94	83	543	582
Alberta	166	148	222	181	125	143	513	472
B.C.	234	180	329	302	176	180	739	662
Yukon	7	13	27	24	4	1	38	38
CANADA ¹	1,862	1,749	2,646	2,281	1,344	1,604	5,852	5,634

¹ Excluding N.W.T. for which Agency has received no statistics.

Over thirty per cent of the applications submitted in 1992 were by carriers based in their respective jurisdictions. (Figure 5.4) A significant decrease of resident-based applications of close to 50 per cent was noted in Nova Scotia. The provinces of Newfoundland, Prince Edward Island and Ontario each registered near 30 per cent reductions in applications from carriers based in these provinces. The decrease in Alberta applications was somewhat less, at around the 10 per cent level. In Québec, the number of resident-based applications marginally

increased. The number of resident-based applications in Yukon almost doubled when compared to 1991, while Manitoba and Saskatchewan each registered close to a 50 per cent increase. New Brunswick noted a somewhat lower increase, below 20 per cent.

Close to two-fifths of the total number of licence applications received in 1992 were from carriers requesting authority in Canadian provinces other than their base jurisdictions. The remaining applications were from U.S.-based carriers.

Over 96 per cent of extra-provincial applications were approved. Opposition to applications continued to decrease. A total of 34 applications were denied in Québec for administrative reasons for which it is not possible to distinguish between licences to sub-contracting carriers (including owner-operators), temporary licences, and other categories not subject to the public interest test.

The majority of carriers consulted in 1992 through the Agency's Motor Carrier Interview process indicated that they had not applied for extra-provincial domestic or international authorities during the year. This follows the same downward trend over the last four years, when 80 per cent of the carriers in 1988 reported applying for authorities, compared to 63 per cent in 1989, roughly 51 per cent in 1990, and near 33 per cent in 1991. Most of the firms interviewed indicated that there was no real reason to apply as they had all the authorities they needed.

Market Entry by U.S. Carriers

As shown in Table 5.1, the number of applications for extra-provincial authorities by U.S.-based carriers increased overall by 19 per cent. Québec registered the largest number at 546, a significant increase of 71 per cent from 1991. Increases of a somewhat lesser degree were registered in Ontario, Manitoba, and Alberta. The Atlantic provinces, with the exception of Prince Edward Island, all showed a decrease in applications from U.S.-based carriers. Yukon also registered a substantial decrease.

The number of U.S.-based carriers holding operating authorities in Canada at the end of 1992 totalled 6,377, an increase of 20 per cent over 1991. (Table 5.2) The province with the largest number of U.S. carriers holding licences is Ontario, with a total of 2,506. Québec noted an increase of around 30 per cent over 1991, after having remained stable between 1990 and 1991. The only jurisdiction to register a decrease was Yukon.

Structural Changes

In recent years, the Canadian trucking industry has undergone numerous changes. The most significant changes introduced by carriers resulted

TABLE 5.2
U.S. Carriers Holding Operating
Authorities in Canada

	1990	1991	1992
Nfld.	20	27	33
P.E.I.	28	35	40
N.S.	116	111	134
N.B.	129	196	229
Québec	878	877	1,126
Ontario	1,362	2,066	2,506
Manitoba	407	457	533
Sask.	307	341	404
Alberta	478	559	624
B.C.	568	632	734
Yukon	10	22	14
TOTAL*	4,303	5,323	6,377

* Excluding N.W.T. for which Agency has received no statistics

Carriers continued to rationalize operations to remain financially viable.

FIGURE 5.5

ICC Applications by Canadian Carriers
1986 - 1992

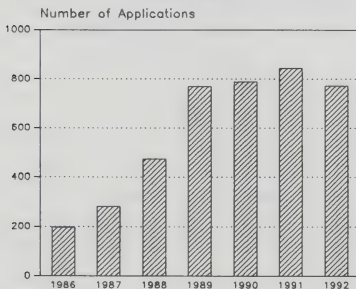
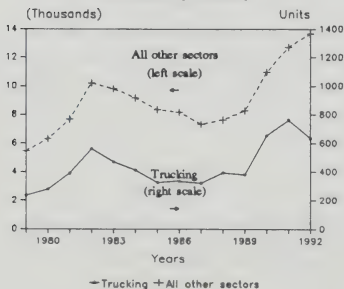


FIGURE 5.6
Bankruptcies Reported
in Canada by Industry



in market expansion, operational adjustments or consolidations, or simply market withdrawals.

Early in 1992, an event of significance took place when Canada Transport entered into agreements to sell its less-than-truckload (LTL) operations to Meyers Transport (for the Québec/eastern Ontario portion) and Manitoulin Transport (for the western Ontario portion). Also in 1992, Cabano Transport Group negotiated with Federal Industries Ltd. to buy LTL transportation operations and assets of Kingsway Transports Ltd., one of Federal's affiliates. One of the main advantages of the arrangement is that it gave Cabano access to the U.S. market. While Cabano took over Kingsway's LTL operations in eastern Canada, it also, through its subsidiary Kingsway Transports of America Inc., provided service to LTL markets in 19 northeastern states and expanded truckload service to the 48 states. It also formed a three year strategic alliance with Motorways, another carrier owned by Federal. While Kingsway services Québec and Ontario and Cabano hauls in Québec, Ontario and the Maritimes, this arrangement with Motorways opens up the western market, enabling Cabano-Kingsway to offer its customers across-Canada service.

In an effort to rationalize the operations of its Canadian trucking firm, CP Trucks sold its U.S. truckload operations in October 1992. Its parcel delivery service, CANPAR, was eventually sold in early 1993 to allow the firm to concentrate its resources on the truckload and LTL businesses in Canada.

Since the late 1980's, shifts in trade patterns and changing markets have led to greater reliance on triangular service patterns, involving both domestic and transborder movements. This has been made possible by the use of continental strategies by Canadian-based carriers using expanded operating authorities in both Canada and the United States. While the number of applications for U.S. Interstate Commerce Commission (ICC) authority by Canadian-based carriers in 1991 was four times that for 1986, the total number of applications in 1992 has decreased slightly from the previous year with eight per cent fewer applications. (Figure 5.5)

Market Exit

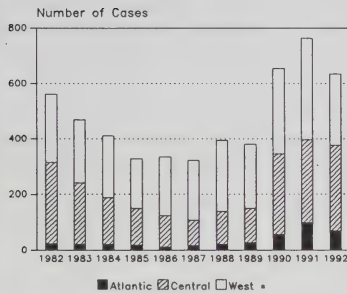
A carrier operating trucking services in the marketplace can terminate its activities in more than one way: it can close its operations; it can merge its activities with the ones of another carrier; it can move its operations to a different jurisdiction or to the U.S.; or it can file for bankruptcy. Of all these possible "exit" scenarios, bankruptcy is the one addressed here, as it is the only one for which information is available.

The number of business bankruptcies reported for trucking totalled 636 in 1992, a 17 per cent decrease from 1991. When bankruptcies are analyzed in terms of trend, one can observe that the trend in trucking

parallels closely the one observed in the rest of the economy. (Figure 5.6) This, of course, results from the "derived" nature of the demand for trucking services. Therefore, when all other sectors are experiencing tough times, the trucking sector also faces difficulties. In 1992, while the number of bankruptcies in all other sectors continued to increase, the reported number of bankruptcies in trucking came down. This trend reversal cannot be disassociated from the lower number of licensed applications in recent years and the different operational adjustments introduced by carriers to reflect the new market forces at play.

Québec was the only province to register a slight increase in the number of trucking bankruptcies, a province where the number of licence applications has remained relatively constant since 1990. Some western provinces, namely, Manitoba, Saskatchewan, and British Columbia, registered substantial decreases while the Atlantic provinces, with the exception of Prince Edward Island, noted decreases of a somewhat lesser degree. Ontario remained fairly stable over 1991. (Figure 5.7)

FIGURE 5.7
Business Bankruptcies Reported
for Trucking
1982 - 1992



*Includes Yukon and N.W.T.

TABLE 5.3
Breakdown of 1991-92 Trucking Bankruptcies
by Type of Activities

Jurisdiction	Trucking bankruptcies reported		Type of Activity Bankrupt Trucking Businesses					
			Business with extra-provincial trucking licence		Business with other type of trucking licence (e.g., local)		Other type of trucking businesses ¹	
	1991	1992	1991	1992	1991	1992	1991	1992
Nfld.	14	11	0	0	2	0	12	11
P.E.I.	1	1	0	0	0	0	1	1
N.S.	50	37	0	1	0	0	50	36
N.B.	33	21	0	0	0	0	33	21
Québec	108	119	28	16	8	5	72	98
Ontario	191	188	17	10	12	27	162	151
Manitoba	44	13	4	0	0	0	40	13
Sask.	32	13	2	0	0	0	30	13
Alberta	147	145	4	4	21	39	122	102
B.C.	143	88	10	0	7	11	126	77
Yukon	0	0	-	-	-	-	-	-
N.W.T.	0	0	-	-	-	-	-	-
TOTAL	763	636	65	31	50	82	648	523

¹ Includes businesses not requiring trucking licences and owner-operators and lease operators.

- The 636 bankruptcy cases reported in trucking during 1992 represents a total of \$88.6 million in liabilities, compared to \$135.9 million in liabilities for 1991.
- The average liability value of the trucking businesses reported bankrupt in 1992 was \$139,230.
- Eighty-six per cent of all the bankrupt trucking firms reported liabilities of less than \$200,000.
- Ten firms reported liabilities of over \$1 million: two of them were located in Québec, four in Ontario, one in Alberta and three in British Columbia. Together these firms totalled \$18.5 million, or about 21 per cent of the total liabilities of trucking firms reported bankrupt in 1992.
- Of the 636 trucking bankruptcies reported in 1992, only 31 or five per cent were identified by provincial licensing boards as trucking firms holding extra-provincial operating authorities. (Table 5.3)
- On a regional basis, over 50 per cent of the trucking businesses with extra-provincial licence authorities reported bankrupt in 1992 were based in Québec; a third were based in Ontario, the others based either in Alberta or Nova Scotia.

Competition

From the results of the Agency's 1992 Shippers' Survey, the proportion of shippers reporting increases in the number of carriers competing for their traffic has continued to decline from the previous year. However, increases were reported in the transborder market and to a lesser degree in extra-provincial services. (Figure 5.8) These findings apply to both truckload and LTL services, although the increase in the level of competition was somewhat lower for LTL, with the exception of the local/intra-provincial segment.

In 1991, there was a significant decline in the proportion of shippers reporting increases in the number of carriers competing for their traffic in virtually all sectors, after experiencing increased proportions in the three previous years. The proportion of shippers indicating increased competition in 1992 continued to decline in both the truckload and LTL sectors with the exception of the LTL transborder market where competition appears to have stabilized.

In relation to freight carried extra-provincially by trucking firms, nearly 27 per cent of shippers indicated an increase in the number of trucking firms competing for their truckload extra-provincial services. A somewhat lower proportion of shippers involved in LTL services (less than one-quarter) noted increases in competition. (Table 5.4)

FIGURE 5.8
Shippers Reporting More Carriers
Competing for their Traffic
(By Market Segment) - 1992

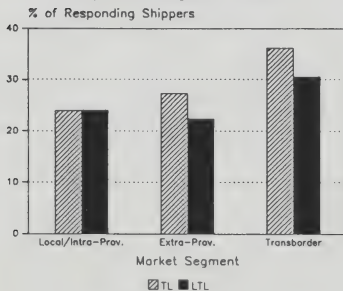


TABLE 5.4
Shippers Reporting An Increase In Carriers Competing for
their Traffic by Market Segment 1989 - 1992

	1989	1990	1991	1992
	<i>% of responses</i>			
Truckload				
Extra-Provincial	38	42	32	27
Transborder	33	46	44	36
LTL				
Extra-Provincial	31	35	27	22
Transborder	31	35	31	31

More competition was observed in the transborder market, as 36 per cent of shippers noted increases in the number of trucking firms competing for their truckload transborder traffic compared to 31 per cent in the LTL segment.

Over 10 per cent of shippers indicated that they had shifted traffic from truck to rail, comprised of rail carload and TOFC (trailer-on-flat-car). Modal shifts of traffic from truck to COFC (container-on-flat-car) were less prevalent, as reported by six per cent of shippers. Greater than half of these respondents indicated the shift was due to better price/rates. A smaller percentage (between three and 10 per cent) indicated a traffic shift from rail to truck. The majority of shippers cited price and market changes as equally important factors in this shift.

Domestic

Shippers' Perspective

On a regional basis, the degree of competition in truckload services was more pronounced in central Canada, where over one-third of the shippers in both Québec and Ontario reported increases in the number of carriers competing for their traffic. (Figure 5.9)

The proportion of shippers reporting increased competition was also very strong in Saskatchewan, Alberta and British Columbia and to a lesser degree in Manitoba, Nova Scotia and New Brunswick. In all these areas, the noted increase in level of competition was typically higher for truckload than for LTL services. (Figure 5.10)

In all regions, with the exception of Newfoundland, Nova Scotia and the territories, the proportion of shippers reporting more competition in the truckload sector declined in 1992 relative to the previous year. For the

FIGURE 5.9
Shippers Reporting More Carriers
Competing for their Traffic
(Extra-Provincial Services) - TL

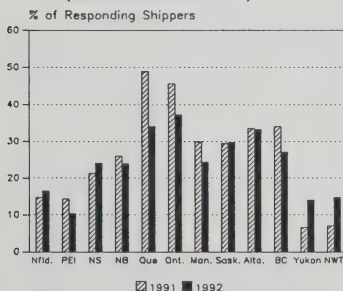
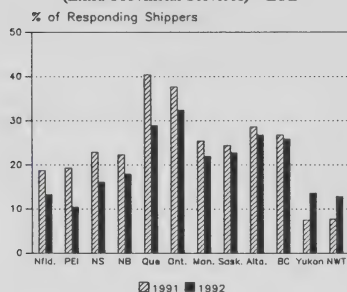


FIGURE 5.10
Shippers Reporting More Carriers
Competing for their Traffic
(Extra-Provincial Services) - LTL



territories, close to 14 per cent of shippers reported more competition in 1992, compared to seven per cent a year earlier.

For LTL services, the regional pattern closely paralleled that for truckload operations. Since 1988, the proportion of shippers indicating more competition in LTL services has been lower than for truckload services. In 1992, a relatively higher proportion of shippers in the territories reported more LTL competition than in 1991.

In 1991, there was a significant decline in the proportion of shippers reporting more carrier competition for their traffic, a trend which has continued in 1992. This decline was observed among all sizes of shippers and in both truckload and LTL services, with the exception of small LTL shippers, for which the level of competition increased slightly. (Table 5.5)

TABLE 5.5
Change in Number of Carriers Competing for Shippers
Traffic by Size of Freight Bill - Extra-Provincial

Sector Size of Shipper Freight Bill	Increase		No Change		Decrease	
	1991	1992	1991	1992	1991	1992
<i>% of responses</i>						
Truckload						
Under \$1 million	32	33	55	60	13	7
\$1 - \$10 million	37	27	48	58	15	15
Over \$10 million	27	19	54	69	19	12
LTL						
Under \$1 million	31	34	56	57	13	9
\$1 - \$10 million	26	17	52	65	21	18
Over \$10 million	23	14	60	75	17	11

Carriers' Perspective

Of the carriers consulted through the Motor Carrier Interview Program, more than half reported that the levels of competition in the domestic market had increased, while one-third of carriers interviewed indicated that the level of domestic competition had, in fact, declined.

These reported changes varied by region and no representative national trend could be identified. For instance, all responding carriers in the Atlantic region, in both the truckload and LTL segments, reported decreases in the level of competition which they attributed, in large part, to bankruptcies and mergers in the trucking industry in that region. Québec carriers indicated increased competition in both truckload and LTL operations. The increased competition was reported to have come

from both new and existing carriers, particularly affecting the Toronto-Montréal market, and is representative of the evolution of licensing applications in the province.

In Ontario, reported changes in levels of competition were sporadic, although for truckload operations in general it was reported that competition had levelled off from previous years. In the LTL sector, although there were fewer carriers competing, it was felt that there was still excess capacity for the relatively low volumes of freight.

Manitoba carriers noted an increase in the number of trucking firms setting up operations in both the truckload and LTL sectors. One of the problems facing LTL carriers was the move by truckload carriers to consolidate loads of LTL freight into a single truckload shipment. In Saskatchewan, some carriers involved in the carriage of specialized freight indicated competition had merely shifted, rather than increased, due to the loss of some contracts and their replacement by others. Alberta carriers indicated that competition was still quite fierce, especially in the specialized tank truck business. In British Columbia, carriers noted an increase in domestic competition which came from smaller sized trucking firms confronted with an eroded traffic base.

Transborder

Shippers' Perspective

In transborder markets, traffic was almost evenly divided between Canadian and U.S.-based carriers. Twenty per cent of shippers reported switching from Canadian to U.S.-based carriers in 1992; however less than half reported a change in total traffic volumes.

Some shippers find Canadian carriers provide a higher level of service than their U.S. counterparts; however, when competing with other U.S. companies, who have an advantage of lower costs, such shippers feel compelled to use American rather than Canadian carriers because of rates.

In assessing changes in the level of competition in transborder trucking activities, shippers have reported regional differences. In 1992, the highest proportion of shippers reporting increased competition was observed in central Canada.

A higher proportion of shippers reported increased level of competition in truckload than in LTL services. In LTL, 31 per cent of shippers surveyed indicated that there had been more carriers competing for their traffic, in comparison to 36 per cent in truckload operations.

From results collected from the 1992 Agency Shippers' Survey, Atlantic Canada's shippers indicated that competition in both the truckload and LTL transborder markets has increased. However, in Nova Scotia and

FIGURE 5.11
Shippers Reporting More Carriers
Competing for their Traffic
(Transborder Services) - TL

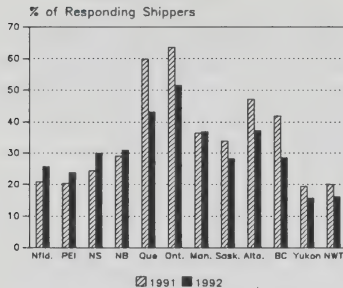
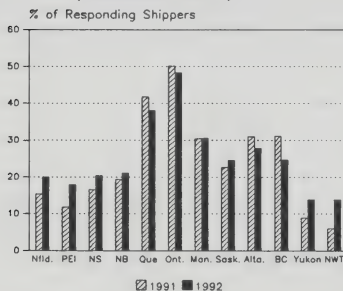


FIGURE 5.12
Shippers Reporting More Carriers
Competing for their Traffic
(Transborder Services) - LTL



New Brunswick, more shippers reported an increase in competition in truckload services than for LTL services. (Figure 5.11)

In Ontario, over one-half of the shippers indicated that the number of carriers competing for their truckload traffic increased in 1992; the proportion in Québec was marginally lower.

The highest proportion of shippers reporting an increase in the level of competition in LTL services was observed in Ontario. (Figure 5.12)

Approximately 30 per cent of responding shippers from western Canada indicated increased competition in the truckload sector. The proportion of shippers reporting more carriers competing for their truckload traffic in 1992 as compared to the previous year, however, declined noticeably in Alberta and British Columbia. In the LTL transborder sector, a greater proportion of shippers indicated increased competition in Manitoba, Saskatchewan and the territories.

Carriers' Perspective

In 1992, a very substantial proportion of responding carriers (96 per cent) across all regions indicated that the level of competition in the transborder sector had increased over 1991.

On a regional basis, in Atlantic and central Canada, responding carriers indicated a higher degree of competition in the transborder market. Also, an increased level of competition in the transborder sector was reported by over 90 per cent of western region carriers.

This increased competition reported by Canadian carriers was identified as coming from U.S.-based carriers.

Private Carriers

Private carriers (shippers operating their own fleet) are primarily involved in the transport of their own goods, as in the case of some manufacturers or retailers. However, a number of private carriers have also obtained licences to offer services on a for-hire basis.

Over 60 per cent of the respondents to the Agency 1992 Shippers' Survey reported using their own truck fleet for at least part of their traffic. However, close to three-quarters of these respondents indicated such private truck activities were restricted to 20 per cent or less of their traffic volumes. A comparison between 1992 and 1991 survey results indicated that shippers moved a smaller proportion of their own traffic with their own truck fleet.

Only 20 per cent of shippers operating a private fleet of trucks in 1992 indicated an increase in their degree of reliance on their own fleet for

their transportation requirements. Between 1991 and 1992, an increase in the reliance on private fleet was reported by large-sized shippers.

Close to one-half of respondents to the Agency Shippers' Survey indicated that they had used the services of a private carrier operating for-hire services, with over one-quarter reporting an increased usage.

Some large shippers indicated reducing their involvement in trucking activities, typically in sectors where safety and environmental factors prevail, e.g. liquid bulk.

Overall, carriers consulted for the Review indicated various regional trends in the involvement of private fleets in the for-hire sector over the past year, with few reporting any loss of traffic to private carriers. While reductions in the number of private fleets were noted in British Columbia, Manitoba and Québec, an increase in private fleet usage was reported in Ontario. The use of private carriers was mainly for truckload services rather than LTL services.

Concerning competition from private carriers, the majority of for-hire carriers interviewed did not foresee any long-term impact arising from private carriage activities as they believed that for-hire services had an advantage. The fact that some shippers have attempted to lower their transportation costs by shifting traffic from their own fleet to for-hire carriers would prove that point. Nevertheless, for-hire carriers indicated that private carriers have provided competition for them by capturing some freight in the for-hire market in order to fill empty back-hauls. Such competition was evident mostly in general freight and in the food products and retail sectors.

Shippers' Reactions to Rate Increases

As in previous years, the majority of shippers confronted with rate increase proposals in 1992 for either truckload or LTL services managed to successfully negotiate a reduction. (Table 5.6) However, successful rate reduction negotiation has been consistently higher among truckload than LTL users. A greater proportion of LTL shippers indicated having absorbed the increase. The incidence of modal shifts in response to freight rate increases was negligible as less than three per cent of truckload and LTL shippers indicated having switched to another mode in reaction to a rate increase.

In reacting to proposed rate increases by carriers in 1992, some 60 per cent of responding truckload shippers reported that they had successfully negotiated reductions. When facing proposed increases, nearly 34 per cent of truckload shippers reacted by switching some of their traffic to another trucking firm. A similar pattern was indicated by LTL shippers, although the percentage of respondents was somewhat lower for LTL services. Other shippers either absorbed the rate increase or adjusted the price of their goods accordingly.

TABLE 5.6
Shippers' Reactions to Proposed Rate Increases

	Truckload			LTL		
	1990	1991	1992	1990	1991	1992
	% of shippers responding					
Successfully negotiated a reduction in the increase	50	56	60	45	51	55
Adjusted the price of goods accordingly	17	13	12	17	15	10
Absorbed the increase	33	24	21	39	34	28
Switched to other trucking firm	31	33	34	25	30	31
Switched to other mode of transport	5	4	3	3	2	2

When dealing with rate increases proposed by carriers, the larger shippers (i.e., annual freight bills over \$10 million) have had the most success in negotiating a reduction of the proposed increase. In 1992, 70 per cent of larger shippers using LTL services reported having negotiated a reduction compared to 44 per cent for smaller shippers; a similar pattern is observed among truckload users. (Table 5.7)

TABLE 5.7
Shippers' Reactions to Proposed Rate Increases
by Size of Shipper Freight Bill -1992

	Truckload			LTL		
	Under \$1M	\$1-\$10M	Over \$10M	Under \$1M	\$1-\$10M	Over \$10M
	% of shippers					
Successfully negotiated a reduction in the increase	51	61	72	44	63	70
Adjusted the price of goods accordingly	13	10	11	9	10	9
Absorbed the increase	18	27	20	28	34	20
Switched to other trucking firm	37	28	34	32	21	39
Switched to other mode of transport	1	4	5	3	1	1

The second most frequently cited action taken to deal with a proposed rate increase was to switch to another trucking firm. Whereas the small-sized truckload shippers, with annual freight bills under \$1 million, indicated moving to another trucking company, the incidence of such a

switch in the LTL services was reported predominantly by the large-sized shippers. A significant proportion of LTL shippers tended to absorb a proposed rate increase.

Shippers' Views

Unless a shipper is doing a large volume of business with a certain for-hire carrier, the ability to process and win claims for damage seems to be getting very difficult; shippers are of the opinion that carriers should be practising a more pro-active method of loss control. According to some shippers, carriers are trying to justify higher rates based on quality programs and quality performance. Two reported concerns of shippers are the disappearance of older established trucking firms in Ontario and Québec, and many mergers and takeovers by foreign companies.

Shippers indicated that they have shifted a lot of their traffic from national carriers to regional ones due to a reduction in the number of such carriers compared to two years ago. A growing concern among large shippers is that there are fewer national carriers to bid on large volumes of traffic, forcing them to employ more carriers.

Various shippers indicated their frustration over the lack of uniformity of trucking rules between provinces, e.g., 53 foot trailers, axle weight limits, etc. Such variations make it difficult to build an efficient distribution system.

Traffic and Rates

Traffic

The weak Canadian economy continued to have an impact on the demand for trucking services in 1992 although, according to the Shippers' Survey results, more industry sectors reported freight volume increases than decreases. Reductions in freight volumes carried by truck were especially evident in the mining and chemical industries as well as in the electrical and electronic products industries.

Shippers' Perspective

Consistent with past years, almost all shippers participating in the Agency's 1992 survey reported using truck for at least some of their transportation needs, and over two-thirds of those shippers used truck transport for most of their company's shipments.

In total, 31 per cent of shippers surveyed reported an increase in 1992 in their freight carried by truck as compared to 21 per cent reporting an increase in 1991. (Figure 5.13) This increase in truck traffic is consistent with total increases in traffic reported through the Shippers'

FIGURE 5.13
Change in Shippers' Freight Volume
1992 vs 1991

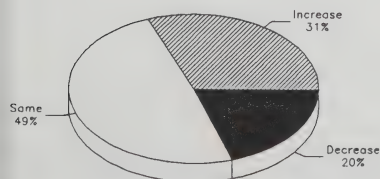
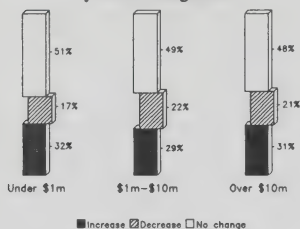


FIGURE 5.14
Change in Shippers' Freight Volume
by Size of Freight Bill



Survey, and therefore is not indicative of a shift from another mode. In terms of location of shippers' facilities, the highest proportion of increases in volumes of freight carried by truck were reported by shippers with facilities in British Columbia, Alberta, Ontario, Québec, Nova Scotia and Prince Edward Island. The highest proportion of decreases were observed in Yukon and Northwest Territories. The proportions of increases and decreases in freight volume reported did not vary significantly by the relative importance of the shipper's freight bill. (Figure 5.14)

Carriers' Perspective

Most carriers consulted for the 1992 Review indicated either no change in traffic from 1991 levels or slight decreases. However, a number of carriers reported increasing their traffic by picking up the business left by carriers who exited the market or, in certain circumstances, by filling a gap resulting from rail abandonments. From a regional perspective, the federally imposed moratorium on northern cod has effectively eliminated backhaul from Newfoundland. Ontario carriers expressed concern over the general erosion of the region's economic base which resulted in lower traffic levels overall. The traditional dependency on the agricultural sector in Saskatchewan explains the recent declines in traffic in that part of the country.

TABLE 5.8
Unit Freight Cost Changes in Truckload Services
Reported by Shippers

	Extra-Provincial Domestic			Transborder		
	1990	1991	1992	1990	1991	1992
Unit Freight Costs	% of shippers responding					
<i>Increase</i>						
13% +	0	0	0	0	0	0
9 - 12%	2	1	1	3	1	1
5 - 8%	22	11	3	20	9	7
1 - 4%	38	29	28	36	26	23
<i>No Change</i>	26	42	49	27	44	47
<i>Decrease</i>						
1 - 4%	6	10	11	6	10	11
5 - 8%	4	4	5	4	6	8
9 - 12%	1	2	1	2	2	1
13% +	1	1	2	2	2	2

Rates

Shippers' Perspective

Rate changes during 1992 continued to be influenced by weak levels of demand and excess capacity which prevailed throughout the industry. Users of truckload services have been experiencing steadily improving unit freight cost conditions since 1988, a situation which continued in 1992. (Figures 5.15 and 5.16) The proportion of shippers reporting no change in truckload rates reached 49 per cent in the domestic sector and 47 per cent for transborder services. Reported increases in rates over the previous year continued to decline. Where increases were noted, they were predominantly in the one to four per cent range. (Table 5.8)

FIGURE 5.15
Change in Domestic TL
Rate Levels

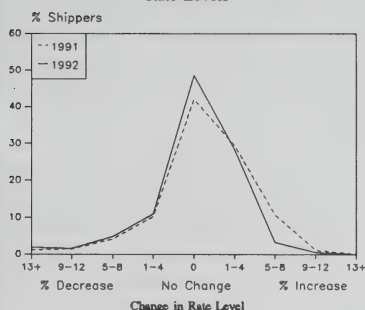


FIGURE 5.16
Change in Transborder TL
Rate Levels

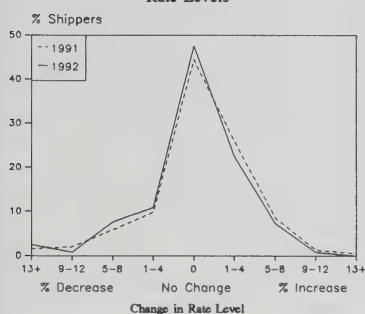


FIGURE 5.17
Change in Domestic LTL
Rate Levels

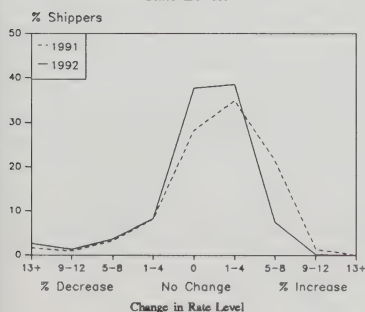


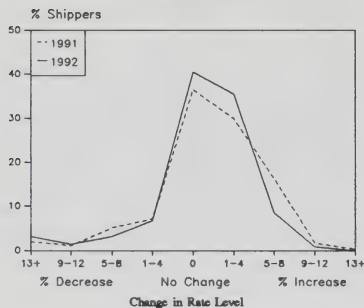
TABLE 5.9

Unit Freight Cost Changes in LTL Services Reported by Shippers

	Extra-Provincial Domestic			Transborder		
	1990	1991	1992	1990	1991	1992
Unit Freight Costs	<i>% of shippers responding</i>					
<i>Increase</i>						
13% +	1	0	0	1	0	0
9 - 12%	3	1	0	4	2	1
5 - 8%	35	22	7	28	17	9
1 - 4%	34	35	39	33	29	35
<i>No Change</i>	19	28	38	25	37	40
<i>Decrease</i>						
1 - 4%	3	8	8	4	7	7
5 - 8%	4	3	4	3	5	3
9 - 12%	0	1	1	1	1	2
13% +	1	2	3	1	2	3

While the proportion of shippers reporting rate increases in the LTL market also declined in 1992, the relative proportion continued to be higher than in the truckload sector. (Figures 5.17 and 5.18) Whereas 38 per cent of domestic and 40 per cent of transborder LTL shippers indicated no change in rates, 46 per cent of domestic and 45 per cent of transborder users reported an increase. As with the truckload market, the majority of increases were in the range of one to four per cent. Increases of five per cent and more were more prominent for transborder than for domestic services. (Table 5.9)

FIGURE 5.18
Change in Transborder LTL
Rate Levels



Carriers' Perspective

Carriers consulted for the review reported being more careful about their pricing practices in general and particularly on transborder routes where they could not compete with the larger and more efficient U.S. companies. In the domestic market, however, carriers indicated that pricing remained subject to strong competitive pressures. While detailed information on unit revenues was not solicited from carriers, it is possible, from their general responses, to derive some consistency with the findings of the Shippers' Survey.

In general, the fierce competition of the past few years appears to have stabilized, although the domestic LTL market remains very competitive especially in central Canada. Carriers are adjusting to low overall traffic levels by assuming business left by bankrupt carriers, and particularly for companies in Ontario and Atlantic Canada, by expanding their traditional market areas. In an effort to retain or increase their market share, carriers are becoming increasingly sensitive to shippers' demands by focussing attention on rates while improving the quality of service.

Claims of increased transborder competition were heard from carriers in Québec and Ontario. This increased U.S. carrier competition was most often explained by cost advantages enjoyed by U.S. carriers and increases in demand for north/south movements. Evidence reported in the "Market Entry" section showed an increase in the number of U.S. carriers holding operating authorities in Québec and Ontario. Canadian carriers who are unable to compete with U.S. carriers have responded by forming alliances with U.S. carriers or opening terminals in the U.S. Those carriers with U.S. operations most frequently listed fuel prices as the major operating cost difference, although the depreciation of the Canadian dollar lessened the gap in the last half of the year. Québec carriers were the only ones not to report new opportunities opening up as a result of freer access to U.S. markets.

Level of Competition versus Rates

The level of competition has tended to have a direct influence on rate changes. Shippers indicated that the level of competition intensified from 1990 to 1991. This increase in competition translated into a significant drop in reported increases in unit freight costs in all trucking markets (local, intra-provincial, extra-provincial and transborder). The trend continued in 1992. Survey results indicated that shippers who reported having fewer trucking firms competing for their traffic were among those facing rate increases. Results also showed that in competitive situations, some shippers faced rate increases. However, under conditions of strong competition and low traffic volumes, carriers have tended to avoid rate increases in an effort to retain their market share. This was observed in both the domestic and transborder sectors. (Table 5.10)

TABLE 5.10
Impact of Change in Level of Competition on Shippers Unit Freight Costs

Number of trucking firms competing for shippers' traffic	TL			LTL		
	1990	1991	1992	1990	1991	1992
<i>% of responding shippers with increased unit costs</i>						
Domestic						
Less	75	53	43	82	59	57
No Change	62	50	42	74	71	53
More	59	39	27	69	58	47
Transborder						
Less	88	31	37	89	47	61
No Change	55	43	35	68	59	42
More	54	31	20	56	51	40

Rate Changes and Shippers' Size

While the proportion of shippers reporting increases in unit freight costs has remained fairly constant over the past few years, the proportion of shippers facing increases in excess of five per cent has decreased dramatically. In 1991, the proportion of shippers reporting rate increases in excess of five per cent came down significantly, a situation which continued in 1992 in all markets, although changes were relatively minor in the transborder truckload market. (Table 5.11)

TABLE 5.11
Change in Shippers Unit Freight Costs by Shipper Size

	Domestic				Transborder			
	1989	1990	1991	1992	1989	1990	1991	1992
<i>% shippers reporting increases of 5% or more</i>								
Truckload								
Under \$1M	27	33	18	7	21	35	13	12
\$1M-\$10M	15	21	10	3	14	20	12	11
Over \$10M	10	12	4	1	10	12	4	1
LTL								
Under \$1M	34	45	29	10	27	39	21	11
\$1M-\$10M	32	34	19	8	32	32	21	13
Over \$10M	22	30	14	1	27	17	9	3

Overall, survey results indicated that the proportion of shippers reporting rate increases did not vary by shipper size. However, as has been the trend in previous years, there were differences by shipper size when

considering the magnitude of the rate changes. Specifically, rate increases in excess of five per cent were less prevalent among larger shippers: those with annual freight bills in excess of \$10 million.

Trucking Operations

Shippers' Perspective

Carriers adopt new technologies to meet shippers' demands for improved service.

Shippers have continued to place more emphasis on the "quality" of service offered by trucking firms. Truck transportation is considered in the broader context of total logistics needs of companies. As a result, higher trucking costs can be accepted if they are, for instance, to be more than compensated by inventory cost savings. This, of course, results in greater emphasis being placed on the reliability of the service being offered. Large shippers, more and more, require that trucking firms be able to track their shipments.

However, many small carriers lack the resources and management skills required to implement technology-driven systems, such as EDI and satellite tracking, thus being driven out of some business segments. The concept of logistics management is reshaping the distribution business. Companies are looking beyond transportation, to consider effects on warehousing, inventory, and customer service. Carriers must improve their understanding of logistics issues to effectively market their services.

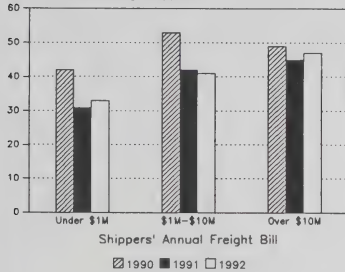
Canada's traditional east-west patterns are being replaced by north-south trade. Such changing distribution patterns affect demand for trucking services. Trucking companies have to adjust their networks to conform to new shipment patterns. The number of national carriers has declined due to mergers, consolidations, etc. At the same time, many shippers are reducing the number of trucking companies that they deal with, and moving toward longer-term, shipper-carrier relationships, a strategy referred to as the "core carrier" concept.

The intermodal competitive forces at play are significant. Traffic shifts from rail to truck are levelling off, and railways are seeking to regain lost traffic by providing intermodal technology and service improvements.

The lack of uniform standards of provincial/federal legislation and regulations has been raised as an issue by both carrier and shipper groups. Both parties have suggested that extra-provincial trucking become the responsibility of a central, multi-jurisdictional body, to achieve uniformity.

Reduction in Number of Carriers Used

FIGURE 5.19
Shippers Indicating a Reduction in the
Number of Carriers Handling their Traffic
% of Responding Shippers



In order to improve their financial situation, carriers have continued to pursue strategies to capture more of a client's truck traffic. Shippers have also found benefits in consolidating their freight shipments by using "core" carriers. Although this trend was particularly prevalent in 1990 when half of the shippers using truck transport reported a reduction in the number of carriers they used, almost 40 per cent reported a reduction in 1992. Of those who reported reductions, 63 per cent indicated the action had produced favourable results. The tendency to consolidate freight operations was more prevalent among large shippers, those with annual freight bills in excess of \$10 million. However, mid-size shippers expressed greater satisfaction with the reduction in the number of carriers handling their traffic than either the smaller shippers (annual freight bills less than \$1 million) or larger shippers. (Figure 5.19)

Freight Brokers

Forty-four per cent of shippers reported using the services of freight brokers. They were predominantly shippers using Canadian-based carriers in extra-provincial and transborder markets, and to a lesser extent, shippers using U.S.-based carriers in transborder activities. Freight brokers were used marginally more for truckload than LTL services. This has remained stable over the past few years.

Shippers' Satisfaction

A survey conducted by the National Transportation Act Review Commission confirmed earlier Agency Shippers' Survey conclusions that shippers, in general, have been satisfied with the level and quality of trucking services since 1988. This was further confirmed for 1992, as only six per cent of shippers surveyed by the Agency reported a deterioration in service compared to 28 per cent who reported improvement. This situation continues to be related to the level of competition prevailing in the marketplace as those who reported an improvement in trucking services also reported an increase in the number of firms competing for their business. This was also borne out by the carriers themselves who reported having to work harder to maintain market share, and having to place more emphasis on the quality of service offered.

From information collected from the Shippers' Survey, thirty per cent of shippers experienced an overall improvement in truckload services; a somewhat lower percentage (25 per cent) noted improvement in LTL services. (Table 5.12) Less than 10 per cent of shippers using both truckload and LTL services indicated any deterioration in service. More than 95 per cent of shippers were satisfied to varying degrees with truckload, for-hire services.

TABLE 5.12
Overall Changes in For-Hire Trucking Services:
Shippers' Perspective 1989-1992

	1989	1990	1991	1992
	<i>% of shippers responding</i>			
<i>Improvement</i>				
Truckload	44	44	37	30
LTL	37	35	33	25
<i>No change</i>				
Truckload	52	50	55	66
LTL	56	55	55	66
<i>Deterioration</i>				
Truckload	4	6	8	4
LTL	8	10	12	9

Service Factors Assessed

- Equipment Supply
- Equipment Condition
- Service Frequency
- Service Reliability
- Transit Time
- Claims Handling
- Carrier Cooperation
- Overall Quality of Service
- Overall Efficiency of Service

Of the service factors that shippers were asked to assess, (see box) "carrier cooperation" was the factor which received the most frequent positive rating for both truckload and LTL services. "Claims handling" continued to be ranked poorly. Also ranked very high by the majority of shippers were "service frequency", "reliability" and "quality". For truckload services, where overnight and just-in-time services are important, "transit time" was ranked second to "carrier cooperation". U.S.-based carriers received better ratings on "equipment supply and condition" than Canadian carriers. This could be an indicator of the generally depressed state of the economy and the recent poor performance of the Canadian trucking industry. It also supports the understanding that Canadian carriers keep their equipment longer on average and have, therefore, fallen behind in adopting new technologies. However, there was an increase in new Class 8 registrations in almost every province during 1992, which may indicate the beginning of a turnaround.

Carriers' Perspective

The Agency's Carrier Interview Program in 1992 differed from previous years in that it covered a much smaller group of carriers. Provincial trucking associations, provincial government and board officials were interviewed, on a series of pre-determined issues. Participants gave their views on changes in levels of competition (domestic and transborder), industry structure, extra-provincial barriers, regulation, intermodal transport and regional concerns. While the small sample size does not purport to represent the views of all carriers, the results may be used as an indicator of the industry's evolution and concerns.

In all provinces except Québec and Saskatchewan, trucking firms reported that small volumes of truck traffic were lost to rail, especially to CN intermodal piggyback and double-stack services, primarily due to

lower rail prices on long hauls. In the Maritimes, recent branchline abandonments have shifted traffic from rail to truck.

In the struggle to survive, trucking companies are either rationalizing and downsizing to control costs, or expanding operations into new market areas and diversifying services. A number of Atlantic region carriers reported that they anticipated purchasing new equipment in the near future.

FIGURE 5.20

Numbers of Owner-Operators Used

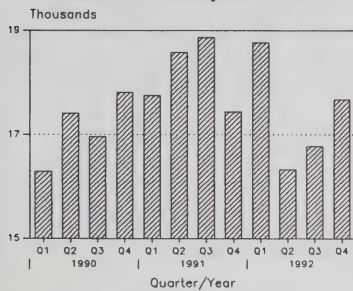
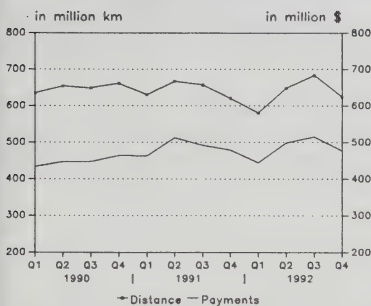


FIGURE 5.21

Payments to Owner-Operators
and Distance Travelled



Carriers reported that the number of owner-operators has declined and that new entrants were rare. Owner-operators continued to be popular in Manitoba and British Columbia, as carriers prefer to use them to avoid the purchase of costly equipment, whereas in Atlantic Canada hiring owner-operators is perceived as being less efficient than having company drivers. Ontario carriers found the supply too unreliable to be of benefit. Figures 5.20 and 5.21 correlate information provided by carriers.

Carriers reported that the services of a freight broker were essential to ensure a return load when doing business in the U.S.

Lack of uniformity among provincial regulations continues to be a problem, especially in Ontario where standards for weights and dimensions head the list. Atlantic region carriers report the most difficulties with the lack of uniformity between jurisdictions' standards, the reason being that the traffic flows force them to travel between the east coast and Ontario and Québec. They anticipate the Memorandum of Understanding Respecting Maritime Provinces Transportation Regulation (Maritime MOU) will resolve uniformity problems in the four eastern provinces.

The majority of carriers across the country felt that they had suffered from deregulation, especially because of increased competition. Those who felt it had a positive effect cited the ability to expand into new markets. Alberta-based carriers recorded the most positive attitude.

Most carriers expressed the opinion that the reverse onus test served no practical purpose. High on the list of recommended entry criteria was safety enforcement. Ontario and British Columbia carriers also emphasized the importance of financial fitness criteria.

In general, established carriers now have appropriate authorities to operate wherever they want. A significant proportion of licences now being applied for are for intra-provincial or specialized services.

Regional Overview

Atlantic - Carriers were generally enthusiastic about the proposed fixed link to Prince Edward Island which should result in considerable savings in time as well as more reliable service. The federally imposed

Most carriers felt "reverse onus" served no real purpose.

TABLE 5.13
New Class 8 Registrations in
Canada, By Province
1991 - 1992

	1991	1992
Nfld.	77	65
P.E.I.	28	30
N.S.	218	202
N.B.	338	397
Quebec	1,873	2,287
Ontario	3,102	4,169
Manitoba	219	336
Sask.	328	435
Alberta	1,709	1,845
B.C.	1,116	1,226
TOTAL	9,008	10,992

Source: R.L. Polk & Co. Ltd.

moratorium on northern cod, which has effectively eliminated backhaul from Newfoundland, has resulted in increases in rates reported by the Atlantic Provinces Trucking Association of 15 to 20 per cent.

Québec - The most prominent issue in Québec remains one of enforcement of provincial and international regulations. For instance, Québec carriers felt that Customs and Immigration regulations on transborder traffic, as well as provincial weight and size restrictions, were not being enforced thoroughly and uniformly.

Ontario - Ontario carriers were more concerned with the general erosion of the region's economic base, which has resulted in lower traffic levels. They argued for more tax breaks to improve their operating position with U.S. truckers and were in favour of dedicated taxes for infrastructure improvements.

Manitoba - Manitoba carriers reported a decline in the number of smaller carriers, those less likely to survive a general economic recession. Large carriers have been either purchasing the assets of the smaller carriers or simply assuming their business.

Saskatchewan - Saskatchewan carriers noted their dependency on the agricultural sector, which explains their recent declines in traffic. They were also concerned that further deregulation of intra-provincial trucking would result in a loss of service to smaller communities.

Alberta - Lack of uniformity of provincial standards was a major concern to Alberta carriers, who also criticized the lack of enforcement of the National Safety Code.

British Columbia - British Columbia carriers were particularly concerned with competition from American companies as the north/south trade expands.

Equipment

One of the indicators of the level of investment in power units is the registration of new heavy vehicles. In 1991, it was at its lowest level since 1984, and had been declining steadily since 1988. (Figure 5.22) Recessionary conditions, weaker markets, high interest rates, high volumes of available equipment as a result of bankruptcies or closures, coupled with poor financial performance, contributed to the three year decline in demand for new tractors.

However, in 1992, the number of registrations of new Class 8 Vehicles (gross vehicle weight over 14,968 kg.) increased by 22 per cent overall when compared to 1991 levels. Regionally, these registrations have increased in all provinces except Newfoundland and Nova Scotia. (Table 5.13)

FIGURE 5.22
New Class 8 Registrations in Canada
1982 - 1992

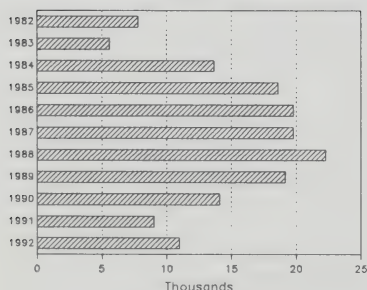


FIGURE 5.23
Operating Ratios for the Industry
and the Major Canadian Carriers
1988 - 1992

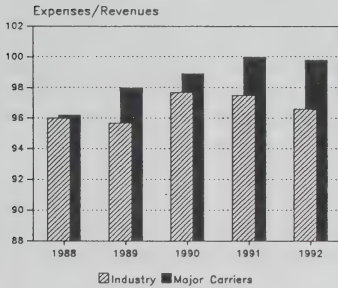
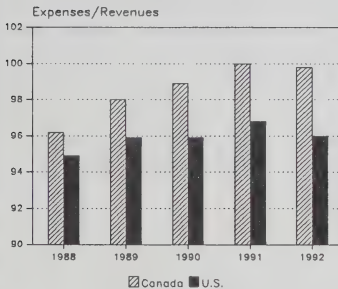


FIGURE 5.24
Operating Ratios for
Major Canadian and U.S. Carriers
1988 - 1992



Canada: Annual Revenue of \$25 million
U.S.: Top 100

A similar situation was observed in the U.S., where 1992 sales of Class 8 Vehicles increased by 21 per cent over 1991. This could, perhaps, be a sign of upcoming better times for the trucking industry.

Carrier Performance

Financial Operations

The financial performance of the major carriers (i.e., carriers with annual operating revenues of \$25 million or more) continued to show very little improvement. According to data reported for the year 1992, the operating ratio of major carriers was 99.8, a slight decrease from the figure of 100.0 for 1991.

For the industry as a whole (both major carriers and the rest of the industry), the 1992 operating ratio of 96.6 compared to 97.5 in the previous year is an indication that adjustments introduced by carriers are starting to reflect on the financial performance. (Figure 5.23)

Consultations with carriers indicated that their financial performance in 1992 remained about the same as in the previous year.

Canada-U.S. Comparison

In recent years, the financial results achieved by major carriers in Canada and in the U.S. have differed significantly. The U.S. major carriers over the 1988 to 1992 period have always managed to achieve more favourable operating ratios than Canada's major carriers. A deteriorating operating ratio situation was observed on both sides of the border up until 1991. Then in 1992, the deterioration continued in Canada while improvements were achieved in the U.S.

For the year 1992, operating income for the top 100 U.S. carriers increased by 28 per cent from 1991, while net income rose by 50 per cent.

The difference in the composite operating ratio between Canadian and U.S. carriers has steadily widened in the last few years, from a difference of 1.3 percentage points in 1988 to a 3.8 spread for 1992. (Figure 5.24) The largest gains in operating ratios were reported by U.S. carriers involved in truckload and regional LTL markets.

Royal Commission on National Passenger Transportation

The Royal Commission's report indicated that Canada's motor vehicle transportation systems should move to a user-pay system, including a fuel tax to discourage use of pollution-causing fuels. Highway construction and maintenance should be turned over to special authorities who would recover costs using tolls and gas taxes.

RCNPT recommended that Crown Corporations manage highway construction and maintenance.

Although trucking was not specified in the Commission's mandate, their proposal to recover road cost from users requires an appropriate division of those costs among cars, buses and trucks. The Commission recommended that each provincial and territorial government establish a Crown Corporation, supplemented by an advisory group, to provide roads more efficiently and make road pricing and investment decisions more transparent.

There are major implications for the trucking industry, stemming from the user-pay concept, which runs as a common thread throughout the report. Two recommendations which touch upon truck transportation of freight are:

- conventional tolling systems should be considered when new or expanded limited access highways are required, with tolls set to cover any costs of the road link in question exceeding those recovered by fuel taxes; and
- provincial and territorial governments institute weight-distance taxes for trucks as part of an overall road-financing program.

With regard to the National Highway System (NHS) proposal, the Royal Commission recommended that:

- the extent of restoration and upgrading of the national highway network be guided by comparison of benefits and costs of individual projects;
- provincial and territorial governments meet costs of their highway system, and any agreed upon NHS projects within their borders, through fuel taxes and other charges; and
- a National Highway System be identified by the Council of Ministers Responsible for Transportation and Highway Safety and the system be operated/maintained through co-operative action of provincial and territorial governments and/or their road agencies.

National Transportation Act Review Commission Evaluation of the *MVTA*, 1987

Shippers reported to NTARC that they had benefitted from the provisions of the MVTA, 1987.

Shippers generally supported the provisions of the *MVTA*, 1987 because they felt that the Act had increased transport options and services and promoted greater efficiency. They felt that the deterioration of the Canadian trucking industry's financial condition was more the result of the overall economic environment than of deregulation.

The "reverse-onus" issue was addressed by shippers who supported the sunseting of the provisions and restricting entry to fitness only. Shippers gave widespread support to the basic thrust and general provisions of the Act because they believed that competition had indeed increased, leading to improved rates and service options. They indicated that they had benefitted from expanded and more efficient services.

Entry control was identified as one area lacking in uniformity, according to shipper submissions. There was a general consensus on the need for greater uniformity on issues such as weight limits, equipment size, insurance requirements, etc. A need for greater extra-provincial harmonization and co-ordination of provincial trucking regulations was also identified. Several submissions called for uniform safety standards and stronger enforcement.

Carriers were concerned about the lack of national regulatory standards.

In comments received from carriers through submissions to NTARC, the creation of an integrated national transportation policy which respects competition and market forces and is implemented consistently and fairly by all governments was recommended.

Carriers expressed great concern about the financial health of the trucking industry, about the lack of uniformity of trucking regulations, and the lack of adequate enforcement. They recommended a stronger entry and fitness test with better enforcement, as well as more harmonization and coordination of trucking regulations.

Most trucking firms generally supported extending the "reverse onus" provision because they felt that the current fitness test was not adequate to ensure a stable and safe trucking industry. It was seen as the only mechanism available to ensure a level playing field with U.S. carriers, where the industry continues to be heavily regulated in some states. One trucking firm felt safety and fitness should be the only criteria used in assessing applications. Most submissions, in particular those from the Canadian Trucking Association and the B.C. Motor Carrier Commission, emphasized the need for these reverse onus provisions to remain in place until such time as the criteria for a more effective and significant fitness test has been established to provide a meaningful adjustment period.

Trucking firms were concerned with higher taxation levels on Canadian firms relative to U.S. firms and with other regulatory policies. They have tied the relative impact of taxation to the viability of a national industry. Their major concern for the future rests primarily with international competitiveness.

Among some of the suggestions were the immediate highway infrastructure improvement, streamlining of the licensing process so that an extra-provincial carrier is only required to obtain one licence to operate across all provinces, putting nationwide standards for safety and fitness into regulations under the *MVTA, 1987*, and creating a central federal/provincial body with power to determine fitness if provinces fail to enforce it uniformly.

Recommendations Related to Trucking

NTARC reviewed the recommendation for a financial fitness test and concluded that it was not required for the protection of investors and consumers, a decision that was justified on the grounds that as the industry relies heavily on debt financing, the financial institutions can exercise the necessary discipline. Accordingly, NTARC recommended a "uniform fitness test in all jurisdictions and that its objectives be limited to screening out unsafe and uninsured operators."

NTARC set a deadline of March 31, 1994 for uniformity of operating standards and full implementation of the NSC.

Particular reference was made to past public spending on transportation infrastructure and the need now to employ private sector capital for priority requirements. They encouraged the involvement of the private sector, consistent with the "user pay - user say" concept and, accordingly, recommended that the government offer "flexible infrastructure investment opportunities, with appropriate public accountability".

The Commission noted concern over the lack of uniformity in trucking regulation and stated it "impedes efficiency of the industry and compromises our national ability to trade between provinces and with the United States." The Commission recommended that if the Minister of Transport and provincial governments could not agree on the standardization of operating and technical specifications by March 31, 1994 then the federal government should introduce appropriate legislation to be administered by the provinces.

NTARC declared the failure of jurisdictions to fully implement the National Safety Code (NSC) "unacceptable where the safety of all highway users may be compromised". The Commission recommended, therefore, that the Minister of Transport work to resolve the outstanding safety aspects of extra-provincial trucking and that failure to implement an acceptable standard of safety regulations, including the NSC, by March 31, 1994 should result in the withdrawal of "the delegation to administer extra-provincial trucking regulation and/or withhold federal contributions to highway infrastructure."

MARINE SERVICES

Canadian International Liner Shipping

Highlights of 1992

Rationalization Plans and Joint Service Agreements Continued to Proliferate

Cost saving measures continued to dominate the corporate thinking of most liner operators, taking the form of continued rationalization of services and increases in vessel-sharing partnerships and joint service offerings.

Shipping Lines Expanded Landbridge Services

As part of the liner industry's rationalization scheme, landbridge services, especially on the eastern Canada/Far East and the western Canada-U.K./Continent routes, have grown spectacularly, offering shippers more routing options for their overseas exports and imports.

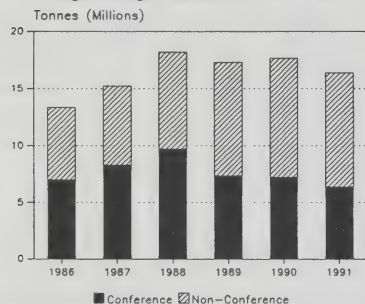
Market Forces, Not Government Regulation, Dictated Changes in Liner Shipping

The Agency's analysis confirmed that changes in traffic levels, levels of service, ocean freight rates and the structure of the liner shipping industry serving Canada in 1992 have been driven by market forces rather than legislation governing the operations of shipping conferences.

Bulk shipments consistently dominate waterborne trade.

FIGURE 6.1

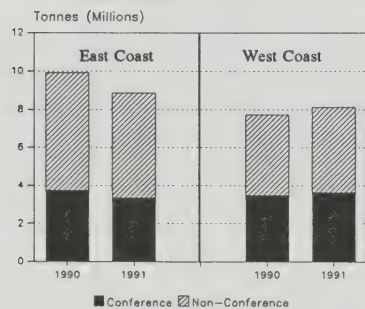
**Canadian International Liner Trade
Cargo Through Canadian and U.S. Ports**



Note: Tonnes for 1989-1991 include Canadian transshipments through U.S. ports

FIGURE 6.2

**Canadian East and West Coast
Liner Trade for 1990 and 1991**



Note: Tonnes include Canadian transshipments through U.S. ports

Significance of International Liner Trade

In terms of volume of freight carried, marine remains the single most important mode in Canadian international transportation. Non-liner bulk shipments constituted the vast majority, approximately 94 per cent, of Canadian waterborne trade in 1991, the most recent year for which statistics are available. Almost 218 million tonnes of bulk freight were moved by water in 1991, down by four per cent from 1990.

The higher unit values of the six per cent of total freight moving in liner services make it a significant component of total Canadian international waterborne trade. As seen in Figure 6.1, tonnages carried in liner trade decreased by seven per cent between 1990 and 1991. Totals from 1989 to the present have been adjusted by eliminating U.S. cargo moving through the eastern ports of Montréal and Halifax, and adding Canadian cargo moving through U.S. ports in order to better reflect total tonnages moved in Canadian international liner trade.

Both conference and non-conference tonnages decreased from 1990 to 1991 although their relative proportions of total trade remained steady over the same period with conference member lines carrying 40 per cent of tonnage and non-conference operators the other 60 per cent.

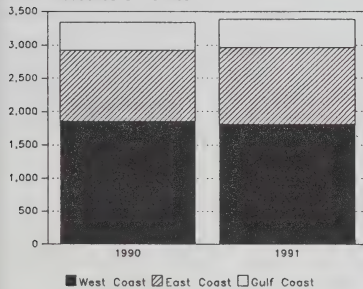
Although over one-half of total Canadian liner cargo was still handled on the Canadian and U.S. east coasts, tonnages decreased from 62 per cent in 1990 to 52 per cent in 1991, with the remaining 48 per cent moving via the west coasts of Canada and the U.S. While tonnages carried to or from the east coast by conference and non-conference operators decreased, tonnages carried by both via the west coast increased (Figure 6.2).

Twenty-five conferences served Canada's major trade routes, either directly or via U.S. ports in 1991. In 1991, conference member lines carried 37 per cent of the total Canadian tonnage moving through Canadian ports. The four Transpacific conferences -- the Canada Westbound Rate Agreement (CWRA), the Asia North America Eastbound Rate Agreement (ANERA), and the Japan East and Japan West Freight Conferences -- again dominated conference carriage, accounting for 43 per cent of total conference tonnage, up two per cent from 1990. These four conferences also handled the largest proportion of Canadian transshipments, with one-third of their total Canadian tonnage moving through ports in the U.S. On the other hand, Canada's four North Atlantic conferences -- the Canada Continental Eastbound and the Continental Canada Westbound Freight Conferences, along with the Canada North Atlantic Westbound Rate Agreement and the Canada United Kingdom Freight Conference -- served Canada directly, making relatively little use of U.S. ports. These four conferences' share of total conference tonnage decreased from 28 per cent in 1990 to 26 per cent in 1991.

Almost one-fifth of Canadian waterborne tonnage moved through U.S. ports in 1991.

FIGURE 6.3

Total Canadian Tonnage Transshipped
Through United States Ports by Coastal Regions
Thousands of Tonnes



As in 1990, a total of 16 per cent (2.7 million tonnes) of Canadian liner trade was transshipped through ports in the U.S. in 1991. Almost two thirds (1.7 million tonnes) were carried by conferences, with the remaining tonnage moving on non-conference vessels. In 1991, more than one-half (58 per cent) of total transshipped liner tonnages moved through ports on the U.S. west coast with the remainder moving through U.S. east (37 per cent) and Gulf coast ports (five per cent). Both conference and non-conference tonnages moved via U.S. west coast ports, the most significant coast in terms of Canadian transshipments, fell by approximately two per cent over 1990 totals, while U.S. east and Gulf coast ports registered a combined increase of approximately 15 per cent over the same period.

In 1991, over a quarter of a million TEUs (i.e., twenty-foot equivalent units) were exported from and imported into Canada via the U.S. Although transshipped tonnages increased between 1990 and 1991, total Canadian container traffic moving through the U.S., measured in terms of TEUs, decreased by four per cent over the same period. This drop was primarily due to the five per cent decrease in Canadian boxes moving through west coast ports, from over 193,000 in 1990 to 182,000 TEUs in 1991. The 10 per cent increase from 75,000 in 1990 to 84,000 TEUs in 1991 moving through the U.S. east coast over the same period was not enough to offset the loss on the west coast. Canadian shippers transshipped few containers through Gulf coast ports in 1990 and 1991.

While the majority of Canadian cargo transshipped through the U.S. is containerized, a portion has been found to consist of bulk and/or neo-bulk commodities. U.S. Gulf coast ports handled the greatest share of this cargo. It is estimated that, in 1991, 410,000 tonnes of Canadian bulk and/or neo-bulk cargo were transshipped through the Gulf.

Level of Service

In 1992, Canadian shippers saw further attempts by liner operators to implement more cost cutting measures in the form of the continued rationalization of liner services, an increase in vessel sharing partnerships and a refining of existing joint service offerings. Much attention was also focussed on the consummation of an agreement between major conference and non-conference operators on the North Atlantic referred to as the Trans Atlantic Agreement (TAA), the North Atlantic counterpart to the Transpacific Stabilization Agreement (TSA) on the Pacific.

Major Events

The North Atlantic and the Mediterranean

The North Atlantic saw both Europe Canada Line and Compagnie Générale Maritime (CGM) withdraw from North American liner trade

*Europe Canada Line and
CGM withdrew from the
North Atlantic.*

*The TAA received FMC
approval in August.*

*CGM and ACL withdrew from
their joint service with
Hapag-Lloyd.*

in March and July of 1992, respectively. Later in the fall, CGM also withdrew from the Mediterranean, as did the Spanish Line. Thus the seven lines initially involved in the Mediterranean joint service were reduced to only five by the end of 1992. The area also saw the start-up of a new joint service out of Montréal by Canada Maritime and Jadroplov, the Croatian shipping line. As well, the container and breakbulk service provided by DSR Line and Metz Container Line was converted to solely a container space sharing agreement. The breakbulk portion of the service is now provided by Metz Canada Line calling at Québec and Saint John.

No doubt the major development on the North Atlantic trade lane was the emergence of the Trans Atlantic Agreement (TAA), the first successful attempt at reaching an agreement on capacity reduction on the over-tonnaged North Atlantic. The TAA received approval from the U.S. Federal Maritime Commission in August 1992 and came into effect late in the year. Its intent is to reduce westbound carrying capacity in the Northern Europe-U.S. east coast trade lanes. It also functions as a rate-setting conference, replacing the two existing U.S. conferences and including as well most of the major non-conference carriers on the route. While still awaiting the European Commission's approval, the TAA's member lines are working on space sharing and rationalization agreements. This agreement has also introduced a new tariff structure which has had a considerable impact on the tariffs of conferences operating on the Canadian North Atlantic routes. In fact, these conferences no longer offer door-to-door rates. The ocean rate is now quoted separately from terminal and inland charges, which must be added on in order to determine the total freight rate.

The Pacific Northwest/Europe

Major changes also occurred on the Pacific Northwest/Europe liner trade route in 1992. The long-time joint service of Italia/d'Amico to the Mediterranean was terminated. Each line now operates independently, with Italia switching to a pure container service calling at Fraser Surrey Docks and d'Amico still offering a mixed service calling at Vancouver. Wallenius Line consolidated its Pacific Northwest service, favouring Tacoma as its single port of call while dropping Fraser Port and Portland. Maersk also decided to serve western Canada via landbridge out of New York rather than through west coast U.S. ports. Finally, CGM and Atlantic Container Line (ACL) withdrew from their joint service with Hapag-Lloyd between the west coast and northern Europe. Hapag-Lloyd then announced that it would be joining NYK Line (NYK) and NOL in their pendulum service, which will result in a loss of a direct call at Vancouver.

The Far East

On Canada's busiest trade lane, to and from the Far East, strategic alliances formed in 1991 and 1992 continued to have a significant

impact, as shipping lines serving the trade coordinated sailings and shared slots on each others' vessels. For example, American President Lines (APL) and OOCL now operate five service loops between the west coast of North America and the Far East. As a result, shippers can now expect improved frequency of calls, port coverage, transit times and flexibility in tune with the growing importance of southeast Asian markets.

Canadian shippers benefitted from increased landbridge services.

The number of landbridge services available to eastern Canadian shippers rose steadily in 1992. The port of Vancouver has benefitted most from the inauguration of joint services such as those of "K" Line/Mitsui and APL/OOCL. Another factor further contributing to a rise in the port's importance was the completion, by the end of 1992, by both CN and CP, of work on tunnels in western Canada which allow the operation of double-stack trains from Vancouver to inland destinations. In addition, in March of 1992, China Ocean Shipping Company (COSCO) made Vancouver its first port of call from Asia, in response to, among other factors, financial incentives offered by the port. Finally, Vancouver was added to the port rotation on NOL/NYK's SCX (Singapore-California Express) service and a new entrant providing a container/ro-ro service, Noram Ocean Transport, began calling at the port in 1992. On the negative side, Vancouver lost calls by Wallnos Line (in conjunction with Wallenius Lines) and Platou-Pacific.

NOL included Halifax in its Far East service via the Suez Canal.

On the east coast-Far East route, following the announcement that NYK would be joining NOL and Hapag-Lloyd in the establishment of a new tri-continent service linking the Far East, North America and Europe, its partner, Mitsui, decided to slot charter space on NYK vessels instead of continuing the east coast service solo. Also, a new NOL service, linking Halifax to the Far East via the Suez Canal, commenced operations in 1992 with NYK chartering space on NOL's vessels. "K" Line and OOCL, NOL's former partners, now serve the east coast overland via west coast ports. Finally, two other new services were inaugurated in 1992; in June, Slobodna Plovidba announced a monthly container and breakbulk service from Saint John to Japan and Korea, and in November, Sinotrans (Chinese Line) launched the same type of service between Montréal and China via the Panama Canal.

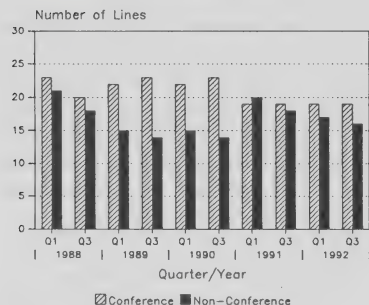
Australia

OOCL quits Halifax and Vancouver.

The Australian trade lane was relatively stable in 1992. Blue Star returned to using its original name after a few months as Blue Star Pace. OOCL, with the termination of its Halifax call, no longer serves Australia via feeder service from the east coast or from Vancouver. However, a new service offered from eastern Canada by Mediterranean Shipping Company sprang up in the fall of 1992 with cargoes transshipped onto its own vessels at Felixstowe.

Changes in Number of Liner Services

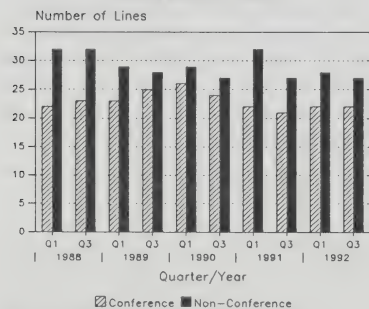
FIGURE 6.4
Liner Services on Major Trade Routes
to/from Western Canada



Note: Includes services via U.S. ports and MLB service

*Landbridge services grew
while all-water services
declined.*

FIGURE 6.5
Liner Services on Major Trade Routes
to/from Eastern Canada



Note: Includes services via U.S. ports and MLB service

*Canadian shippers
experienced no shortage of
space on liner services.*

On both the east and west coasts of Canada, the number of conference lines advertising services for Canadian shippers on Canada's three major liner trade routes remained stable from 1991 to 1992. Meanwhile, the ranks of non-conference operators registered a slight decrease on the west coast over the same period. Overall, the number of lines serving western Canada has remained nearly constant over the last five years while the number of lines serving the eastern Canadian market has declined from 50 in the fall of 1988 to 40 by the fall of 1991 (see Figures 6.4 and 6.5). On most routes, changes are of a continuous but minor nature and are related, more often than not, to market conditions on the routes served.

Service Frequencies

On the western Canada-U.K./Continent route, landbridge services grew in importance at the expense of the all-water route in 1992. On the east coast-Europe route, the number of conference lines offering multiple weekly services has increased since 1990 while the number of weekly services offered by non-conference operators declined.

On the Far East route, conference carriers have consistently offered a much larger number of weekly sailings than independents from both western and eastern Canada. However, in 1992, landbridge routings accounted for the bulk of weekly service offerings from the east coast. The proliferation of conference landbridge services to and from the Far East has been spectacular, reflecting the trend towards strategic alliances now prevailing on the Transpacific. Also, increasing competition between shipping lines in terms of quality of service may translate into multiple calls by a single line at a given port, such as NYK calling at Vancouver as part of three separate weekly services.

The level of service in the Australian trades has also evolved. In 1992, it appeared that fewer major lines serving the Far East route were offering feeder services to Australia as an add-on to their mainline services. Conference carriers operating in this trade rarely provide weekly sailing frequencies due to the length of haul and lower volumes of cargo. It should also be noted that advertised sailings may vary with the time of year and the market served.

Fleet/Capacity Changes

The determination of the capacity (slots) available to Canadian shippers on vessels providing liner shipping services is complicated by numerous factors such as the continuing development of inland feeder services, the larger container vessel size which requires a larger cargo base than Canada alone is capable of generating, the difficulty of identifying the nationality of the cargo transiting or transshipped through Canadian ports, to name only a few. However, given that most major shipping

Shippers using Halifax lost capacity on some liner routes.

routes to and from North America have been characterized by overcapacity of supply in recent years, it is likely that Canadian shippers have generally been able to obtain needed slots for their export and import cargoes.

On the Canadian east coast, NOL continued to call at Halifax from the Far East after the dissolution of its partnership with "K" Line and OOCL, employing six container vessels of 1,600-1,950 TEUs and with NYK space chartering slots on these vessels. On the same trade route, Zim continued to deploy newbuildings on its east coast service which now counts seven 2,400 TEU containerships. However, the port lost calls as a result of Italia Line, CGM and Evergreen joining a group of four other lines serving the Mediterranean from New York, necessitating the redeployment of two 2,200 TEU Italia Line vessels. As well, ABC Containerline withdrew two of its seven conbulkers used on its round-the-world service thereby reducing its number of calls at the port of Halifax.

Montréal liner services added capacity in 1992.

The port of Montréal fared better in 1992, despite Europe Canada Line's demise. The DSR/Metz Containerline service to the Mediterranean replaced three Metz general cargo vessels of 368 TEUs with three 1,000 TEU ships supplied by DSR. Metz will continue to operate a separate breakbulk service with the replaced general cargo vessels. The Canada Maritime/Jadroplov new container service paired two sister ships, under the Yugoslavian flag, to two 800 TEU Canada Maritime vessels, all previously calling at the port. Finally, Balt Canada introduced a new ro-ro vessel to its Montréal/Russia service.

Forest product carriers offered greater capacity out of Saint John.

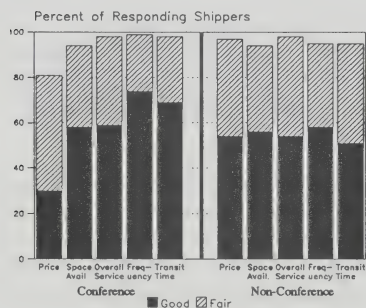
The port of Saint John welcomed the expansion of Kent Line's fleet of forest products carriers to include two side-port newsprint carriers, a 23,000 DWT (deadweight tonnage) bulk carrier and a 14,000 DWT general cargo vessel. Troll Carriers, also calling at Saint John, added a new ro-ro/vehicle carrier with a deadweight tonnage of 42,424 and a 895 TEU capacity.

Joint services on Canada's west coast showed volatility in 1992.

The Canadian west coast witnessed considerable shifts in the vessels in service as joint services and agreements were dissolved and revised throughout the year. When d'Amico and Italia Line decided to end their partnership in their joint service to the Mediterranean, each line continued to provide part of that service separately; d'Amico is now using a fleet of conbulkers of 1,000-1,800 TEUs and Italia Line employs two container vessels of 1,000 TEUs. Former partners NOL and OOCL are now paired with NYK and APL respectively in their plying of the Far East trade lanes. On their NWX (Northwest Express) service, NOL introduced two 3,000 TEU vessels to operate alongside three NYK ships. On their FEX (Far East Express) service, NYK introduced two 3,000 TEU ships and the displaced vessels were redeployed on the NWX service; and, on the partners' SCX (Singapore-California Express) service, employing six vessels of 2,000-3,000 TEUs, a call at Vancouver was added. The OOCL/APL partnership also served the port of

Transit times remained constant in 1992.

FIGURE 6.6
Shippers' Ratings of Service Factors
of Conference and Non-Conference Operators



Shippers rated non-conference carriers better on rates and conference carriers better on frequency and transit times.

Forwarders rated conference and non-conference operators the same.

Vancouver with five 2,400 TEU OOCL vessels on which APL charters slots. Also, on the west coast, Hanjin introduced the first in a series of 4,000 TEU newbuildings to its pendulum service, permitting the redeployment of a 2,700 TEU ship to its PNW (Pacific Northwest) service. Finally, the new entrant to the trade, Noram Ocean Transport, started operating ro-ro/vehicle carriers of 15,000-16,000 deadweight tonnage in the fall of 1992.

Transit Times

On most routes, transit times have been fairly constant over the years. In a few instances where changes in transit times occurred, they were usually directly linked to the entry of a new line or a change in a line's conference status. On the two highest volume routes, between eastern Canada and northern Europe, and between western Canada and the Far East, non-conference carriers offered comparable transit times to those advertised by conference operators. On lower volume routes, there tended to be more differentiation between the transit times offered by conference and non-conference lines.

It should be noted that itineraries vary from voyage to voyage for some lines and that certain ports served via feeder service may be called at less frequently than the mainline ports.

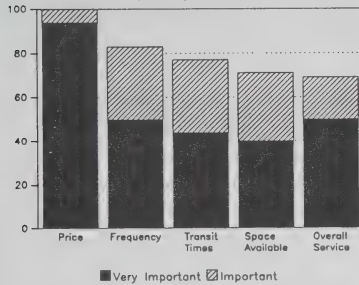
Users' Perceptions of Liner Service Levels

While actual changes in service levels in Canadian international liner shipping have been described in the preceding pages, the Agency also conducted a number of surveys, three of which solicited the views of users on the quality and the level of service they received from liner operators in 1992.

The Agency's 1992 Shippers' Survey asked shippers to rate both conference and non-conference liner operators on a number of service factors. Proportionately more responding shippers rated non-conference carriers "fair" to "good" on rates quoted than did for conference carriers. On the other hand, proportionately more shippers favoured conference carriers over non-conference operators in terms of frequency of sailings and transit times. Identical proportions of shippers rated conference and non-conference operators "fair" to "good" on the availability of space on their vessels and on overall service.

According to the Agency's 1992 Survey of Freight Forwarders, conference lines, as opposed to non-conference carriers, were used most often by these intermediaries. One of every two forwarders engaged in export trade, and two of every three involved in import trade, reported using conference lines in the movement of a majority of their overseas shipments. Only one in five forwarders reported that their shipments

FIGURE 6.7
Forwarders Ratings of Importance of
Service Factors in Selection of a Shipping Line
Percent of Responding Forwarders



Conference and non-conference carriers were rated "acceptable" to "good" by terminal operators.

were equally distributed between conference and non-conference operators.

Survey results also revealed that there was little significant difference in forwarders' perceptions of the level and quality of service offered by conference and non-conference operators with almost all forwarders rating liner services provided by both types of carriers either "reasonable" or "good". Slightly more forwarders (36 per cent) reported a positive change in levels of liner services from 1991 to 1992 than did a negative change (32 per cent) or no change at all (32 per cent).

Forwarders involved in export trade were split on their views of non-conference operators as a viable alternative to conference carriers with 51 per cent stating that they were an option to "a great extent", while 49 per cent saw them as an alternative to only "a limited extent". On the import side, the majority of forwarders saw non-conference operators as a viable alternative to their conference competitors only to "a limited extent".

Port terminal operators were also asked to rate liner services provided by conference and non-conference carriers in 1992. As Agency survey results show, large and equal proportions of terminal operators judged liner services provided by both conference and non-conference operators to be "acceptable" to "good" in export and import trade.

In terms of the number of vessels calling at their terminals in 1992, a majority of terminal operators (61 per cent) noted a change, with over one-half reporting a decline in vessel calls as a result of poor world economic conditions, the recession at home, reduced exports and tonnages shipped, declines in government and private sector spending, and pressure and competition from U.S. ports.

Ocean Freight Rates in Liner Trade

Freight Rates in Canadian Liner Trade

Analysis of changes in ocean freight rates from 1991 to 1992 is based solely on results obtained from the Agency's 1992 surveys of shippers, freight forwarders and shipping conferences.

Less than half of Canadian conferences raised their rates in 1992.

According to the Agency's Survey of Shipping Conferences, which included responses from all conferences operating on Canada's major trade routes to and from the U.K. and Europe, the Far East, and Australia and New Zealand, only nine of 21 responding conferences announced general rate increases (GRIs) in 1992. Only one of these conferences announced more than one GRI (i.e., two). Moreover, only two conferences announced rate increases of a more selective nature (i.e., on a commodity or commodity group basis) in 1992. The majority of conferences implementing rate increases cited operating costs, capital costs and market demand conditions, as well as ancillary charges, as contributing, to one degree or another, to these increases. On the other hand, inland costs and carrier supply conditions (e.g., undercapacity) did not figure into rate increases for the majority of conferences serving Canada in 1992. Eleven conferences actually reported reductions in their

FIGURE 6.8
Shippers' Perceptions of Changes in
Ocean Freight Rates, 1991-1992

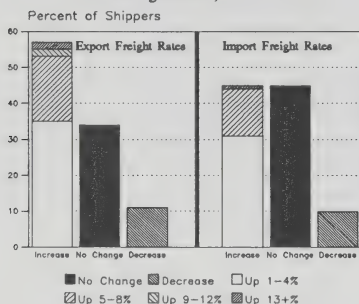
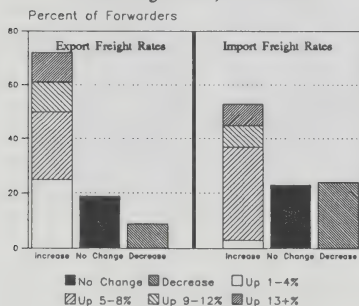


FIGURE 6.9
Forwarders' Perceptions of Changes in
Ocean Freight Rates, 1991-1992



A majority of forwarders were subjected to rate increases in 1992.

standard conference tariffs in 1992. Competition from non-conference carriers, followed by prevailing market conditions, competition from alternative routes and shipper competition from foreign suppliers, were mentioned most frequently by conferences as principal justifications for rate reductions in 1992.

Shippers continued to approach conferences for rate reductions in 1992 with almost one-half of responding conferences receiving between 25 and 100 written requests for such action. However, only one conference fully agreed to all rate reduction requests; six others agreed to reductions to less than half of all requests received. No conference refused all requests for rate reductions in 1992.

Two thirds (14) of responding conferences serving Canada offered through rates (i.e., rates quoted for the totality of a transportation movement requiring more than one carrier) to Canadian shippers in 1992, with just over one-half of these reporting the movement of a significant proportion (i.e., greater than 40 per cent) of their total carryings in this manner. Eleven conferences revealed that tonnages moved on through rates either stayed the same or increased in 1992.

From a user's perspective, the Agency's Shippers' Survey revealed that 55 per cent of Canadian exporters and 45 per cent of Canadian importers reported increases in their ocean freight rates in 1992, results not inconsistent with those obtained from the Agency's Survey of Shipping Conferences. Interestingly, one of every two Canadian shippers either reported no change in their ocean freight rates or that their rates had declined in 1992. For those shippers reporting increases in their export rates, survey results showed these increases to range from one to four per cent for the majority (63 per cent) and from five to eight per cent for close to one-third (32 per cent); a small minority (five per cent) reported increases ranging from nine to over 13 per cent. On the import side, 70 per cent of responding shippers were subjected to increases in rates ranging from one to four per cent while 28 per cent were charged five to eight per cent more; only two per cent reported increases of over 13 per cent in import rates.

Almost three-quarters of responding forwarders involved in the handling of Canadian exports, and one-half of those associated with imports, reported increases in their ocean freight rates, according to the Agency's 1992 Survey of Freight Forwarders. A majority of exporting forwarders reported increases in their rates of the magnitude of one to eight per cent, while increases experienced by a majority of importing forwarders amounted to between five and eight per cent in 1992.

Almost all freight forwarders involved in either export or import trade, utilizing the services of both non-conference and conference operators in 1992, reported that rates levied by the former were lower than those quoted by the latter, and half of these forwarders considered non-conference rates lower by six to 10 per cent in 1992.

MARINE SERVICES

The Shipping Conferences Exemption Act, 1987

Highlights of 1992

SCEA Has Had Little Impact

In keeping with the past trend, a large majority of Canadian shippers and shipping conferences were of the view that *SCEA* had little impact on their operations in 1992. A strong minority of freight forwarders reported a similar lack of impact with respect to their 1992 operations.

The National Transportation Act Review Commission Reviewed SCEA

The National Transportation Act Review Commission (NTARC) received three dozen submissions from interested parties regarding the exemption legislation. Among the issues raised was the retention or abolition of *SCEA* and, if retained, the identification of areas in the Act where changes are necessary.

Industry Structure

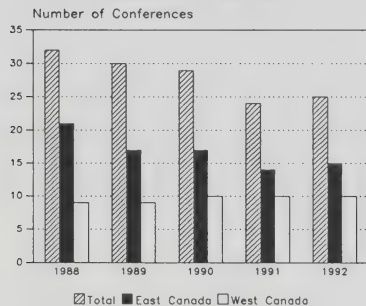
Conference

A group of ocean carriers providing liner services on common trade routes who collectively agree on rates and conditions of service.

Liner Services

Services provided by conference and non-conference shipping lines using vessels operating on fixed itineraries and regular schedules. Liner services normally exclude the movement of bulk commodities.

FIGURE 6.10
Conferences Serving Canada as of
December 31 of Each Year



Service Contract

A confidential agreement filed with the Agency by which a shipper commits a minimum volume of cargo, over a fixed time period, to conference member line(s) in exchange for a rate different than the standard conference rate and/or a defined service level.

With the reclassification of the Uniline/Great Lakes Transcaribbean Agreement from non-tariff to tariff filing, the number of tariff filing conferences operating in Canadian liner trade increased by one to twenty-five in 1992. However, three of these conferences, the Canada West Mediterranean Discussion Agreement, the east coast section of the Inter-American Freight Conference and the Uniline/Great Lakes Transcaribbean Agreement, reported little activity during the year.

In 1992, 14 conferences provided services to Canada's east coast, nine to the west coast and two conferences served both coasts. Of the 25 conferences operating in Canadian trade in 1992, 11 carried exports, nine carried imports and five carried both exports and imports. As in 1991, 43 shipping lines held membership in conferences in 1992. However, the number of shipping lines participating in more than one conference decreased from 20 in 1991 to 19 in 1992.

Other *SCEA* related agreements on file with the Agency increased to 12 in 1992 including six discussion/bridging agreements, four space chartering/sailing agreements, one stabilization agreement as well as one inter-conference agreement.

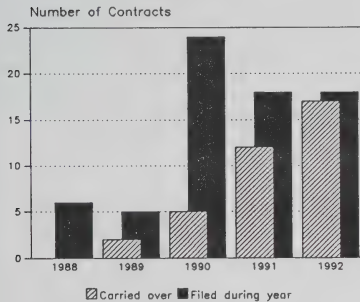
Following the ruling made by the Federal Maritime Commission in 1991 that conferences operating in U.S. trades could no longer extend their jurisdiction to foreign countries, one more joint conference separated its U.S. and Canadian components in 1992. In November, the New Zealand/Pacific Coast North America Shipping Lines refiled its agreement with the Agency under the guise of the New Zealand/Canada Container Lines Association.

Effectiveness of *SCEA*

Service Contracts

Shipping conferences serving Canada filed 18 service contracts with the Agency in 1992, the same number as in the previous year. Of the 18 filed, four expired in 1992 while 14 are due to expire in 1993. Fifteen contracts signed in 1991 and two in 1990 carried over into and expired in 1992. The large carry-over of service contracts from 1991 to 1992 was more a function of the timing of signing (i.e., late in the year) than an indication that the duration of service contracts had increased. By the end of 1992, only 14 service contracts remained in effect. Four conferences, one more than in the previous year, were responsible for all service contracts filed with the Agency in 1992, with one of these conferences filing with the Agency for the first time in 1992.

FIGURE 6.11
Service Contracts Filed with the Agency
1988 - 1992



Independent Action (I/A)

Action by a conference member line of setting a rate or service item different from the conference's existing tariff provisions. SCEA provides for the taking of I/A by any member line subject to informing the conference which cannot demand more than 15 days notice.

Conference Use of Independent Action

The Agency's Survey of Shipping Conferences revealed that member lines of seven conferences filed I/As with the Agency in 1992. Conferences reporting the use of I/A, ranked according to the number of I/As filed in 1992, from the greatest to the fewest, included:

- Canada Westbound Rate Agreement (CWRA)
- Asia North America Eastbound Rate Agreement (ANERA)
- Continental Canadian Westbound Freight Conference (CCWFC)
- Canadian North Atlantic Westbound Freight Conference (CNAWFC)
- Inter-American Freight Conference (Pacific Coast) - Sections A, B, C and D
- Canada-Australia/New Zealand Association of Carriers (CANZAC)
- Western Canada Europe Conference (WCEC)

Fifteen of the 18 service contracts filed covered the export of primary, semi-finished and finished products from both the east and west coasts to destinations on two of Canada's major trade routes. Only three import service contracts covering the movement of miscellaneous commodities were filed in 1992.

Results of the Agency's 1992 Survey of Shipping Conferences indicated that only a small minority of those conferences serving Canada were approached by shippers regarding the negotiation of service contracts. Responding conferences signing service contracts did so on a conference-wide rather than an individual member line basis. Those conferences reporting the use of service contracts revealed that 20 per cent or less of their total tonnage carried moved on this type of rate in 1992.

Independent Action

It would appear that the number of conferences whose member lines employed I/A rates, one of SCEA's principal pro-competitive provisions, declined in 1992. According to the Agency's Survey of Shipping Conferences, seven conferences, six of whose member lines used I/A in 1991, reported employing this rate option in 1992. The Canada-Australia/New Zealand Association of Carriers (CANZAC) made use of I/As for the first time in 1992. Of the four conferences that failed to respond to the Agency's survey in 1992, member lines of only one -- the West Coast Middle East Rate Agreement (WAME) -- filed I/As with the Agency in 1991.

Member lines of four of these seven conferences reported filing under 10 I/As in 1992, one conference filed between 11 and 30, and the CWRA and ANERA, whose lines are the largest users of I/A rates, filed over 1,000 each.

Regarding changes in I/A activity from 1991 to 1992, the survey revealed that the use of these rates remained unchanged in 16 of the 21 responding conferences, increased in two cases and decreased for three conferences. Of those conferences reporting the use of I/A in 1992, five moved less than 10 per cent of their total cargo via this method and only one conference reported moving the majority of its cargo in this manner.

Five conferences using I/A in 1992 reported that, on average, these rates were six to 10 per cent below standard conference rates. The other two conferences reported I/A rates one to five per cent below the conference standard. Just under one-half of responding conferences claimed that conference rates and revenue base were negatively affected by their I/A activity. The use of this rate option by member lines of conferences was not a significant factor in terms of its impact on service levels, conference ability to compete with independents and retain customers, or intra-conference relationships. Regarding the threat of use of I/A, 10 of 12 responding conferences reported that it had little or no effect on existing conference rate structures.

Shippers and forwarders frequently used I/A but...

...for only small proportions of their total shipments.

Canadian shippers and forwarders also provided an indication of their use of I/A rates in 1992. According to the Agency's 1992 survey, about one-third of those forwarders familiar with *SCEA* reported the exclusive or frequent use of I/A rates. Another 50 per cent reported they used I/A rates at least occasionally during the course of their 1992 operations. Moreover, proportionately more forwarders handling Canadian exports made use of this type of rate than did forwarders specializing in imports, although neither group moved the majority of their inbound or outbound shipments on I/A rates.

Trends seen in the use of I/A rates by Canadian shippers were, as revealed by the Agency's survey, similar to those seen for forwarders in that a large majority of shippers -- both exporters and importers -- familiar with *SCEA* moved small proportions (ten per cent or less) of their cargo this way. On the other hand, less than one in five shippers reported I/A rates being used to move a majority of their shipments in 1992.

Perspectives on *SCEA*

Shippers

One out of every two shippers responding to the Agency's 1992 Shippers Survey completed the Marine Services section of the survey. As in past years, responses were received from a representative cross-section of Canadian shippers in terms of size, industry association and trade in which they were involved (i.e., export, import or both).

The 1992 survey again found that a large majority (slightly more than two-thirds) of responding shippers were still unfamiliar with *SCEA* and its provisions. Those unfamiliar with *SCEA* tended to make much more use of freight forwarders and proportionately less direct use of conference and non-conference carriers to arrange their international transport than did those shippers familiar with the legislation. Of the one-third of shippers who reported being familiar with the Act, 60 per cent said that *SCEA* had no effect on creating conditions in liner shipping which enhanced their ability to compete internationally. Two-thirds of shippers familiar with *SCEA* were of the view that the legislation had negatively impacted on them, while only eight per cent said that it had positive implications for competition. While more responding shippers reported a favourable impact of *SCEA*'s service contract and independent action provisions than unfavourable, the majority of "familiar" shippers still saw these provisions as having no effect on their business at all in 1992. The survey also revealed that 88 per cent of shippers thought *SCEA*'s complaint resolution provisions had no impact on their operations.

FIGURE 6.12
Industry Familiarity with *SCEA* in 1992

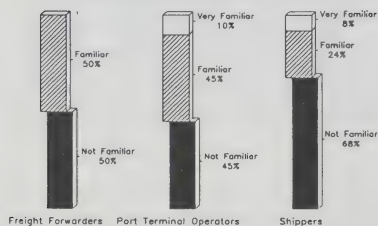
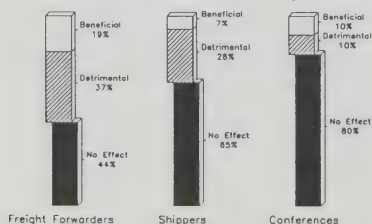


FIGURE 6.13
Effect of *SCEA* in General on 1992 Operations



Comments of substance from shippers on *SCEA*'s effect are conspicuous by their absence in the Agency's 1992 survey. One shipper contended that "*SCEA* (and like international legislation) is detrimental to the shipping community..." and followed this up by saying that "...unfair advantage and privilege is being granted to the ocean carriers to the disadvantage of exporters...". The only other shipper to provide substantive comments complained of the lack of use of *SCEA*'s independent action and service contract provisions in the movement of exports by outbound conferences on the North Atlantic.

Freight Forwarders

Canadian international freight forwarders were again surveyed by the Agency in 1992 on the effect of *SCEA* on their operations. Responding forwarders, representing a cross-section of the industry in terms of size and trade (i.e., export and/or import), were split when asked about their knowledge of the Act; while one-half said they were familiar with the statute, the other half admitted they were not. Results of the survey also revealed that large forwarders were more apt to be familiar with the Act than were small forwarders.

The 1992 survey also found that about one-half of responding forwarders who were familiar with *SCEA* had not been affected at all by the legislation. One-third reported that the Act had been detrimental to their operations while only 22 per cent felt that the statute had benefitted their operations in 1992. A majority (about two-thirds) of forwarders familiar with the legislation also reported no impact of *SCEA*'s service contract, independent action or complaint resolution provisions. On the other hand, notice periods stipulated in *SCEA* for increases in rates or surcharges by conferences were found to be beneficial by a slight majority of responding forwarders.

Designated Shippers Group

In its 1992 Report to the Minister of Transport, the Canadian Shippers Council (CSC) stated that unilateral action by shipping conferences on General Rate Increases (GRIs), surcharges and tariff restructuring led to "...increased transportation costs for Canadian shippers." In the Council's opinion "...the Canadian shipper once again paid for the inefficiency of this antiquated conference cartel system, protected under the Shipping Conferences Exemption Act, 1987." Given constraints on resources, the Council focussed its efforts on the review of *SCEA* undertaken by NTARC in 1992 and on meetings with conferences for purposes of consultation on matters of principle.

In its submission to and meeting with NTARC, the Council called for the outright abolition of *SCEA*, claiming that it "...represents a clear trade hindrance and a tariff barrier..." and that "...conferences have done everything possible to negate whatever few pro-competitive modifications were made to the Act in 1987." The Council reiterated that "Shippers

CSC Disputes Conference Actions

In 1992, the CSC requested meetings with three conferences following disputes involving the application of ancillary charges. In the case of the two Canadian outbound conferences to the U.K. and Europe, the CSC complained that the conference secretariat had unilaterally moved forward an established Currency Adjustment Factor (CAF) modification date by one month and modified the quarterly timing cycle and application terms for CAF changes to bi-weekly, contrary to agreed upon procedures and understandings between the two groups. Despite the Agency's attempt to informally mediate the dispute in a subsequent meeting, the matter still remained unresolved at year's end.

Regarding its dispute with the CWRA, the CSC complained that the conference had failed to provide it with the statutory 14-day notice of a major Fuel Adjustment Factor (FAF) increase implemented on October 1, 1992, thus violating sub-section 9(2) of *SCEA*. As a result of the conference's refusal of the Council's request that the matter be informally mediated, the CSC, at year's end, was still contemplating lodging a formal complaint with the Agency against the CWRA.

must have freedom to negotiate rates and service with the carrier of their choice...confidentially and on an individual basis."

The Council found its numerous meetings in 1992 with the Canada-U.K. and the Canadian Continental Westbound Freight Conferences and the Canada Westbound Rate Agreement to be "...merely information forums for conferences..." who used them to "...inform the Council...of major, irreversible and unilateral action already taken...without prior consultation with the Council on matters such as general rate increases...surcharge application modifications etc. [sic] all adversely affecting Canadian shippers...". In the opinion of the Designated Shippers Group, Canadian conferences "...will use SCEA as a protection when it suits them, but ignore it when it does not serve their best interests...".

Port Terminal Operators

Terminal operators were more familiar with the NTA and MVTA than SCEA.

As part of its survey program, the Agency again sought the views of port terminal operators across the country on current transportation legislation. With respect to SCEA, when asked how familiar they were with the Act in 1992, a slight majority (55 per cent) of responding operators professed some degree of familiarity with the legislation. Results of the 1992 survey also revealed that, among port terminal operators, SCEA is the least known of the three pieces of legislation enacted in 1987.

As in 1991, the survey also showed that terminal operators at Canada Ports Corporation ports appeared to be proportionately more familiar with SCEA than those located in other ports. Unlike last year, smaller port terminals (i.e., with less than 25 employees handling less than 100,000 tonnes of cargo) exhibited more familiarity with the Act than larger terminals. No significant differences in responses were seen, relative to SCEA, in the 1992 survey by type of terminal operated, region of operation or revenues earned from terminal operations.

Shipping Conferences

The Agency received responses on its 1992 Survey of Shipping Conferences from 21 conferences, representing all those conferences operating on Canada's major trade routes. Of the four that did not respond, three were relatively inactive with very few sailings in 1992.

Of the responding conferences, a large majority (16) were of the view that SCEA in general had no effect on the way they did business in 1992. Moreover, when asked if SCEA had had any more of an effect on the way a conference did business in 1992 than in 1991, all but one responded in the negative. Regarding SCEA's pro-competitive provisions of independent action and service contracts, over three-quarters of responding conferences reported that these provisions had had no impact.

*Conference meetings with the
CSC were not fruitful.*

The Agency's survey also inquired about the administration of *SCEA*, one of the Agency's responsibilities. A majority of responding conferences reported no interaction with the Agency in 1992. Where conferences had occasion to interact with the Agency on matters pertaining to the filing of tariffs or agreements, the interpretation of *SCEA* provisions, or complaints and investigations related to the Act, they generally rated "acceptable" to "good" the Agency's responsiveness to their queries. However, regarding the dispute resolution and mediation provisions of the legislation, responding conferences were unanimous in their views that these provisions had had no impact on their business in 1992.

Outbound (export) conferences, when requested, are required to meet with the Designated Shippers Group (the CSC) pursuant to section 20 of *SCEA*. In 1992, only three conferences met with the CSC, a total of seven times, on such matters as GRIs, Currency Adjustment Factors (CAFs), Bunker Adjustment Factors (BAFs) and other ancillary charges and services. As in previous years, these conferences reported that these meetings had little or no effect in terms of resolving differences between shippers and carriers.

National Transportation Act Review Commission Evaluates *SCEA*

Affected Parties Pinpoint Problem Areas in *SCEA* for NTARC

While sometimes taking very different positions on a matter, affected parties, both in favour and opposed to the Act's retention, identified, in their submissions to the NTARC, problem areas where modifications to *SCEA* might be considered to make it palatable if retained:

- **Dispute Resolution Mechanisms**
 - not responsive to shippers' needs; too costly; outcome uncertain
 - more effective mechanism needed
- **Discussion Agreements**
 - not defined in *SCEA*; "basic deficiency in the Act" (Shippers)
 - clarification of status and exemption under *SCEA* (Carriers)
- **Use of Service Contracts and I/A**
 - have not been used effectively
 - inclusion of I/A on service contracts (Shippers)
 - I/A on service contracts would effectively destroy conferences (Carriers)

(continued)

The National Transportation Act Review Commission (NTARC) received briefs on *SCEA* from almost three dozen interested parties led by shipper and industry associations, as well as conference secretariats representing one-half of the 24 conferences serving Canada in 1991. Submissions were also received from other interest groups including provincial governments, port corporations, the Canadian Shippers Council, private individuals and the Industry Advisory Group on *SCEA*, consisting of a cross-section of private and public sector representatives from the Canadian transportation sector.

As part of its mandate, NTARC was asked to determine whether *SCEA* should be retained or abolished. If retained, the Commission was then left with the task of recommending necessary amendments (see box) which would render the Act more effective in meeting the needs of all affected parties.

Parties were polarized on the question of the retention or elimination of *SCEA*. The Canadian Shippers Council, in expressing its support for the outright elimination of the Act, mirrored the views of many of the shipper and industry associations when it expressed the opinion that there was "...a need to open up liner shipping to real competition...", given that *SCEA* had delivered "...no tangible benefits to shippers and Canadian industry as a whole." The Canadian Industrial Transportation League reinforced the Council's position, arguing that "...artificial

(continued)

- **Negotiation of Inland Rates**
 - allow two or more member lines or conferences as a whole to negotiate inland rates
- **Justification of Conference Surcharges**
 - increase control of surcharges
- **Notice Period for I/A**
 - reduce from present 15 days
- **Clarification of Definitions**
 - "conference", "open rates", "discussion agreements"
- **Further Reviews of SCEA**
 - in three to five years
 - re-introduce "sunset clause"
 - discussion with U.S. re continued anti-trust immunity for conferences

The U.S. Advisory Commission on Conferences in Ocean Shipping could not agree on recommendations.

restraints on ocean carriage competition have no place in today's global market, that SCEA does not meet any of the transportation policy objectives stated in the *NTA, 1987*, promotes anti-competitive activities and negatively affects business."

On the other hand, all carrier interests, as well as the provinces of Alberta, Ontario and Nova Scotia, and organizations such as the Atlantic Provinces Transportation Commission (APTC) and Canada Ports Corporation, supported the retention of *SCEA*. Making reference to the need for consistency in the treatment of shipping conferences between Canada and its major trading partners, APTC warned that "...unilateral abandonment of legislation such as *SCEA* could result in the loss of conference lines serving Canadian ports and sever Canadian trade links."

Review of the U.S. Shipping Act of 1984

A number of interested parties making submissions to NTARC opted for the retention of *SCEA*, reasoning that Canadian treatment of shipping conferences should not be incompatible with the approach taken towards regulating conferences by its major trading partners. Indeed, throughout 1992, NTARC closely watched developments related to the work of the U.S. Advisory Commission on Conferences in Ocean Shipping (ACCOS) on recommendations for amendments to the *U.S. Shipping Act of 1984*, the statute upon which *SCEA* was modelled.

In April of 1992, ACCOS presented its review of the *U.S. Shipping Act of 1984* to the President as required by section 18 of the Act. The Commission's mandate was to "conduct a comprehensive study of, and make recommendations concerning, conferences in ocean shipping; and specifically address whether the nation would be best served by prohibiting conferences or by open or closed conferences". The Commission, composed of 17 representatives from both the public and private sector, was unable to present specific recommendations regarding amendments to the Act due to their polarized views on the subject. Instead, the report outlined issues, concerns and recommendations from various interested industry parties. Included in the Commission's final report were statements of individual Commissioners on issues of personal interest to them. Although ACCOS' final report figured significantly into the Maritime Administration's Review of U.S. shipping policy, the proposed package of maritime reforms died with the recessing of Congress in the fall of 1992 and the subsequent change in the Administration.

NTARC Conclusions Related to SCEA

Many submissions received by the Commission called for the retention of the statute in the interest of maintaining a degree of consistency between Canada and its major trading partners in their respective policies related to the treatment of shipping conferences. This convinced NTARC to retain the Act until such a time as the counterpart American

legislation, the *U.S. Shipping Act of 1984*, upon which *SCEA* is modelled, is amended to eliminate its anti-trust immunity for shipping conferences.

Another recommendation directly related to *SCEA* calls for a reduction in the notice period for conference member lines to take independent action from the present 15 to 10 days thus reducing delays in the quoting of reduced rates to Canadian shippers and bringing Canadian legislation in line with the *U.S. Shipping Act of 1984* in this respect. Finally, NTARC recommended that section 5 of *SCEA* be amended to allow conferences as a whole to negotiate the surface portion of through rates with inland carriers, a recommendation which should lead to greater rate flexibility on the part of conferences and which offers the potential for reduced overall transportation costs for shippers.

MARINE SERVICES

Northern Marine Resupply

Highlights of 1992

Users of Marine Resupply Services Rate Carriers Favourably on Levels of Service

According to an Agency survey, licensed marine resupply carriers in both the Mackenzie and Athabasca systems received favourable ratings from a majority of users on several level of service criteria in 1992 including rates, on-time performance, frequency, schedule, flexibility and payment of claims.

A Third Carrier to be Licensed in the Athabasca System

An order of the Privy Council in December rescinded the Agency's July 22 decision denying Lake Athabasca Transport a marine resupply licence and ordered that the carrier be issued a licence for the 1993 and 1994 navigation season.

The National Transportation Act Review Commission Revisited Part V

As part of its review, NTARC undertook to evaluate the impact of Part V (Northern Marine Resupply Services) of the *NTA, 1987* on all parties affected by its provisions.

Number of Carriers and Levels of Service

Licensed Northern Marine Resupply Carriers - 1992 Shipping Season -

Licensed Carrier	Licensed Tonnage
<u>Mackenzie System</u>	
Northern Transportation Company Ltd.	72,246
Cooper Barging Service Ltd.	933
Coastal Marine Ltd.	234
Beluga Transportation Ltd.	215
<u>Athabasca System</u>	
A. Frame Contracting Ltd.	2,655
MacDonald Marine Transport Ltd.	240

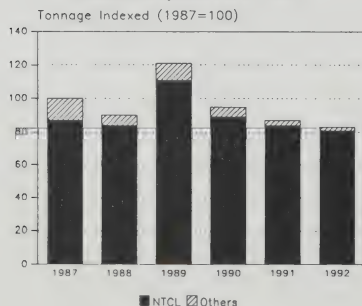
Number of licensed resupply carriers in the North has remained constant since 1988.

Since the enactment of Part V in 1988, the Mackenzie system has seen little change in the number or carrying capacities of licensed marine resupply carriers, and the areas and communities serviced by these carriers. In 1992, Northern Transportation Company Limited (NTCL), the system's principal carrier, once again provided scheduled services to 25 communities on the Mackenzie River, Great Slave Lake and the western Arctic. Excluding main staging and transshipment points, the carrier made a total of 51 calls in 1992 including 15 to Mackenzie River settlements, 16 to the western Arctic, 14 to points on Great Slave Lake and six to communities in the Mackenzie River Delta. Cooper Barging Service Ltd. (Cooper) continued to provide unscheduled and charter services along the Mackenzie and Liard Rivers, making five calls at Wrigley, four at Norman Wells, three to Nahanni Butte, and two to Fort Norman. Coastal Marine Ltd. (Coastal), a small charter carrier operating an intermodal service with Points North Transportation Inc., made eight trips between Inuvik and Tuktoyaktuk while Beluga Transportation Ltd. (Beluga), the other small licensed charter carrier operating in the Mackenzie Delta, managed only one trip to Aklavik in 1992.

In the Athabasca system, shippers have enjoyed the services of at least two licensed marine resupply carriers since 1988. In the 1992 shipping season, the communities of Fort Chipewyan, Uranium City, Fond du Lac, Stony Rapids and Black Lake were resupplied by both A. Frame Contracting Ltd. (Frame), the principal marine carrier in the system, and Macdonald Marine Transport Ltd. (MMTL) on an unscheduled and/or charter basis. Frame managed four trips to each of Fort Chipewyan, Fond du Lac and Uranium City, and nine to Stony Rapids; MMTL called Fort Chipewyan on twelve separate occasions, and Stony Rapids and Fond du Lac seven times in 1992.

Traffic and Tariffs

FIGURE 6.14
Changes in Tonnage Carried in the
Mackenzie System 1987 - 1992

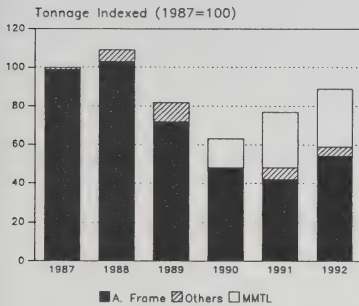


The North being in the grip of a recession, total freight moved by all licensed carriers in the Mackenzie system is estimated to have decreased to approximately 145,250 short tons in 1992 (see Figure 6.14) from about 153,000 short tons in the previous year. A decrease in NTCL's traffic combined with the drop in total tonnages moved by Cooper, Coastal and Beluga in 1992, resulted in an overall decline of five per cent in total waterborne resupply.

As a result of a strike at the Royal Oak Mine in Yellowknife, and NTCL's decision not to provide transportation for the mine's bulk fuel needs, Frame, normally an Athabasca carrier, was contracted to deliver an unknown quantity of fuel to the mine during the 1992 season.

Traffic decreased in the Mackenzie and increased in the Athabasca.

FIGURE 6.15
Changes in Tonnage Carried in
Lake Athabasca System 1987 - 1992



NTCL and MMTL filed rate increases in 1992.

The North's stagnating resource sector once again had a more negative effect on those smaller licensed carriers in the Mackenzie - Cooper, Coastal and Beluga - who rely on the tonnage generated in this sector to remain financially viable. NTCL's carriage of almost all freight destined for North Warning System installations in the western Arctic and occasional freight to Alaska insulated it to some degree from a very weak non-resupply market. The lack of activity in the resource sector in 1992 again increased community resupply cargo's domination (an estimated 86 per cent of total traffic) and, by the same token, NTCL's share of total traffic in the system. As in past years, NTCL carried almost all resupply cargo moved in the system which accounted for 87.5 per cent of the carrier's total traffic in 1992.

For the second consecutive year, total resupply traffic in the Athabasca system increased. The 14 per cent increase from an estimated 10,500 tons in 1991 to just under 12,000 tons in 1992 was attributed, for the most part, to a 30 per cent increase in the volume of northbound freight moved by Frame. MMTL managed to increase its tonnage only slightly in 1992 while Lake Athabasca Transport, an unlicensed carrier, saw its traffic fall by an estimated 18 per cent. Freight moving in support of the construction of a water sewage system in Black Lake, begun in 1992, appeared to account for the higher traffic levels in that year.

Two of six licensed marine carriers proposed changes to their resupply tariffs for the 1992 shipping season. In the Mackenzie, where the Yellowknife CPI showed an increase of 1.1 per cent in the cost of living, NTCL subjected shippers to proposed increases in deck cargo rates of some three per cent to communities along the Mackenzie River and in the western Arctic, and of five per cent on bulk fuel movements. However, shippers received a break on rates from Hay River to Arctic Red River as the carrier filed for a decrease between two and three per cent to bring these rates in line with those to Inuvik. In the Athabasca, MMTL filed for, among others, the imposition of a \$210 handling charge on trailers, a terminal charge of either \$2.50 or \$4.20 per pound on deck cargo and heavy equipment, and a significant rate increase for the movement of empty vehicles. These charges would appear to represent an increase in transportation costs to Athabasca shippers in excess of the change in the Alberta (1.4 per cent) and the Saskatchewan (one per cent) CPIs in 1992. As the Agency could find no basis for denying these rate increases, they became effective in the 1992 shipping season.

Users' Perspective on 1992 Shipping Season

The Agency again surveyed users in the Mackenzie and Athabasca systems regarding the quality and level of marine resupply services they received during the 1992 shipping season. The majority of shippers in

**1992 Survey
of Users of Northern Marine
Resupply Services
- Profile of Respondents -**

Respondents included a cross-section of shipping interests such as businesses, communities, native bands, co-ops, and federal, provincial and territorial governments.

Mackenzie System

- Shippers' major carrier: NTCL (87%)
- 75% of responding shippers were regular users of resupply services
- Two-thirds of shippers reported tonnages moved by barge stayed the same or increased in 1992

Athabasca System

- Shippers' major carrier: A. Frame (52%)
- 66% of responding shippers were regular users of resupply services
- Almost three-quarters of shippers reported tonnages moved by barge stayed the same or increased in 1992

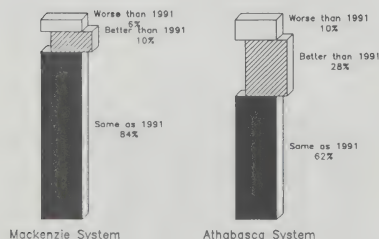
both the Mackenzie and the Athabasca were of the view that marine resupply services in 1992 were similar to those received in 1991, and were generally satisfied with those services provided. Carriers received "acceptable" to "very good" ratings from large majorities of Mackenzie and Athabasca shippers on all aspects of their services including rates charged, on-time performance, frequency, flexibility, schedules and payment of claims. Rates, by a wide margin, were once again seen as the most important level of service factor by responding shippers in both systems.

In the Mackenzie, almost all respondents shipping general or containerized goods reported 1992 rates to be "about the same" or "higher" than those in 1991; yet, two-thirds maintained that these rates were reasonable. The Agency survey revealed similar results in the case of bulk fuel rates. In the Athabasca, a majority of responding shippers moving both general/containerized freight and bulk fuel reported 1992 rates to be reasonable and at levels "about the same" as those of 1991.

TABLE 6.1
Users' Assessment of Marine Resupply Services in 1992

Criteria	Mackenzie System			Athabasca System		
	Very Good /Good %	Acceptable %	Very Poor /Poor %	Very Good /Good %	Acceptable %	Very Poor /Poor %
Price/Rate	17	63	20	50	40	10
On-time Performance	38	45	17	57	38	5
Frequency	53	28	19	72	24	4
Flexibility	41	44	15	70	20	10
Schedule	39	50	11	65	30	5
Payment of Claims	38	48	14	71	12	17

FIGURE 6.16
**Shippers' General Rating of Northern
Marine Resupply Services in 1992**



Regarding competition in the northern marine resupply market, almost two out of three responding Mackenzie shippers felt that they were captive to one marine carrier. In the Athabasca, the results were reversed, with the same proportion of shippers advocating a sufficient choice of carriers. On the need for further competition, shippers were equally divided in both systems. One-half of Mackenzie shippers cited, among other things, "better scheduling, frequency and price competitiveness" as reasons for increased competition. On the other hand, satisfaction with the existing carrier and the view that "the market cannot sustain two or more quality carriers" were given as compelling reasons by the other half for not increasing competition in the system. In the Athabasca, almost half the shippers supported increased

competition as a way of obtaining reduced costs and possibly better service. The remainder did not favour competition due to low volumes, the adequacy of existing services and potential reductions in service quality which could result from too many carriers.

Agency Activities in 1992

*The Governor in Council
overturned Agency's denial of
Lake Athabasca Transport's
licence application.*

Only one matter requiring Agency consideration arose in the Mackenzie system in 1992. A prolonged labour strike at the Royal Oak Mines in Yellowknife led to a decision by NTCL not to deliver bulk fuel in support of the mine's operation. After contacting the Agency in August regarding its status in the matter and receiving a ruling that such a movement did not require a resupply licence, Frame, the principal carrier in the Athabasca system, made the necessary bulk fuel deliveries to the mine.

With respect to the Athabasca system, in a decision issued in July, the Agency denied, for the second time, John Inglis' Lake Athabasca Transport a licence to provide a marine resupply service to Alberta communities on the shores of Lake Athabasca. The applicant subsequently petitioned the Governor in Council to review this decision and, on December 10, the Governor in Council, on the recommendation of the Minister of Transport, rescinded the Agency decision and ordered it to issue Inglis a two-year marine resupply licence effective as of the commencement of the 1993 navigation season.

*The Agency received two
formal complaints in 1992.*

The Agency also received two formal complaints from Athabasca shippers in 1992 regarding MMTL. The first concerned the applicability of the carrier's published northern resupply rates, while the second dealt with the alleged mishandling of a private shipment by MMTL crew members. In both cases, it was concluded that the resolution of these complaints was a matter for the complainants and the carrier, and not the Agency.

*The Agency cited Beluga for
non-compliance.*

Finally, the Agency officially contacted Beluga late in the 1992 shipping season, asking it to show cause why its resupply licence should not be suspended or cancelled pursuant to section 216 of the *NTA, 1987* for failure to comply with northern marine resupply reporting requirements. By year end, the carrier had furnished some of the information required by the Agency for the three years in question.

National Transportation Act Review Commission Revisits Part V

The Commission's call for submissions elicited the following comments from various parties affected by Part V of the *NTA, 1987*:

Users

- All proposed northern marine tariffs should be subject to review by interested parties prior to their implementation.

Provincial Government

- The emphasis should be placed by the Agency on the viability of existing carriers when evaluating new licence applications.
- A notice period should be stipulated in a marine resupply licence for the discontinuance of resupply services.
- A provision for federal subsidies for essential northern marine services should be added to Part V.

Licensed Resupply Carriers

- Part V provisions are generally adequate.
- Annual reporting forms (especially requirements for financial information) should be simplified.
- Annual reporting of financial and operating results should be limited to resupply operations only.
- The Northwest Territories government's naming of NTCL as its designated carrier in all contracts has created a monopoly.
- Some disappointment with the Agency in failing to enforce licensing provisions in a timely fashion was expressed.
- The Agency's role and purpose under Part V "should be re-evaluated and changed to ensure a higher degree of objectivity, responsiveness and effectiveness".

NTARC recommended that Part V of the *NTA, 1987*, dealing exclusively with the licensing of tug and barge operators providing marine resupply services in the North, be retained but reviewed again within five years.

NTARC's only other recommendation pertaining directly to northern marine resupply concerned the amendment of Part V to permit the Agency to regulate terms and conditions of contracts between northern shippers and marine carriers. This would give the Agency greater control over the nature and extent of the conditions of carriage and the power of adjudication in related disputes.

INTERMODAL SERVICES

Highlights of 1992

Developments

Canada Ports Corporation, along with CN and CP Rail, announced *Advantage Canada*, an initiative to promote Canada's transportation system.

CN and CP Rail completed tunnel clearance projects to allow for coast-to-coast double-stack container services and both railways made investments in new double-stack railcars.

The Port of Montréal undertook a dredging project while the Vancouver Port Corporation announced plans for a new container terminal at Roberts Bank.

Traffic

Throughput at Canadian ports was down by eight per cent in 1992, while rail intermodal traffic increased by 6.6 per cent.

Alliances

Canadian railways continued to broaden the scope and coverage of their services through agreements and alliances with other carriers targeting primarily Canada-U.S. traffic.

Intermodalism

Intermodal transport services take advantage of the strength of different modes of transportation to offer services to users that not only meet their needs and expectations but also lower their transportation costs and/or improve the efficiency of the service received. Given the rapidly changing distribution requirements and market conditions faced by shippers, transportation strategies have to be constantly adjusted. The integration of different transportation activities into intermodal operations has been facilitated by the evolution of technology towards greater homogeneity among various transportation activities and the gradual standardization of electronic data information systems.

Intermodal Developments in 1992

Rail Intermodal Developments

CN and CP Rail improved their access to U.S. midwest.

CP Rail announced in 1992 a \$27.5 million investment to enlarge the Windsor-Detroit tunnel, which is jointly owned with CN. The project, when completed, will allow for tri-level railcars, but not double-stack cars.

To increase the speed and efficiency of its service to Chicago, the U.S. midwest transportation hub, CN announced plans in 1991 to build a \$155 million new tunnel connecting Sarnia, Ontario with Port Huron, Michigan; the plans received a favourable ruling on both sides of the border, allowing CN to proceed with the construction. The tunnel, when completed in 1994, will accommodate double-stack and multi-level auto-carrying railcars.

In this respect, in 1992, CN applied to the Agency to convey parts of its St. Clair Tunnel Subdivision to its wholly-owned subsidiary, the St. Clair Tunnel Company.

The first Canada-U.S.-Mexico container rail link was formed.

CN's Sarnia tunnel, when completed, will also play a role in another CN initiative announced in 1992 - the first intermodal container service linking Canada, the U.S. and Mexico. CN North America and APL Land Transport (a division of American President Co. Ltd., the largest operator of double-stack container freight trains) teamed up to offer a service to Toronto and Montréal from Mexico City. APL operates the Mexico City and Laredo, Texas to Chicago run on Union Pacific's tracks, then CN picks up the traffic in Chicago for destinations in central and Atlantic Canada.

CN completed its tunnel clearance project to accommodate the movement of double-stack container trains from Vancouver to eastern Canada.

Both railways had tunnel clearance project work completed in 1992.

By the end of the year, CP Rail's work was completed on its \$15 million tunnel clearance project in western Canada to allow double-stack international container traffic to move from coast-to-coast.

CN announced in January of 1992, an investment of \$12 million for the purchase of double-stack equipment.

CP Rail System increased its double-stack rail equipment fleet by 170 new double-stack railcars in 1992, bringing the total to 220.

Developments at Canadian Ports

A proposal was developed to add a container terminal at the Roberts Bank facility.

In an attempt to increase capacity and enhance the efficiency of port operations, the Vancouver Port Corporation developed a proposal to expand its Roberts Bank facility by adding a \$206 million container terminal. The proposed facility is to have a capacity of 400,000 TEUs (twenty foot equivalent units). The site's ability to handle the largest container vessels afloat, its abundant space for on-dock assembly of double-stack trains and its direct access to CP Rail, CN and Burlington Northern railway lines, make it an ideal location for a container terminal. As well, the terminal's proximity to the U.S. border provides the potential to reclaim Canadian traffic lost to the U.S. ports of Seattle and Tacoma and to capture new traffic originating in the U.S. The recent targeting of the Port of Vancouver as a possible "landbridge" for trade between Asia and Europe also justified forging ahead with the Roberts Bank development project. The construction is due to begin in 1993.

The Vancouver Port Corporation also spent close to \$6 million to extend CENTERM's dock face to simultaneously service two post-Panamax vessels and ordered a fourth crane at a cost of \$6.7 million.

In 1992, the Port of Montréal, in order to remain competitive and to exploit the fact that it is on the shortest, most direct shipping route between Europe and the North American industrial heartland, offered a reduction in applicable port charges for all cargo originating from or destined to Canadian points west of Ontario and the U.S. west or midwest. The port also announced in 1992 that it would freeze its general tariff of port charges for 1993.

The Port of Montréal aggressively pursued traffic through reduced charges and a dredging project.

The Port of Montréal also reached an agreement with the Canadian Coast Guard to finance a maintenance dredging program to increase the depth of the St. Lawrence River channel between the port and Québec City by one foot from the present 35 to 36 feet. At a cost of \$1.15 million, the additional foot of water will allow ships to carry an additional 1,000 tonnes of cargo or between 100 and 120 additional TEUs. Another development likely to improve Montréal's position as a major international container port was the start-up, in June, 1992, of CP Rail's double-stack service between Toronto and Montréal.

The Regan Task Force made recommendations to improve the Port of Halifax's competitiveness.

In August, 1992, the Regan Task Force delivered its report on "*The Future of the Port of Halifax*". Among the Task Force's major recommendations for improving the competitive position of Halifax as an international intermodal distribution centre was the establishment of Halifax as an independent port corporation beyond the control of the Canada Ports Corporation and the federal government. The Task Force also recommended that CN provide more focused attention on the transportation needs of the Maritime provinces and the customers of the Port of Halifax, that CN contribute to the promotion of a competitive, efficient and cost effective intermodal system in support of Canadian ports, and that the *NTA, 1987* be amended to permit non-compensatory rail rates for the movement of export and/or import containers. The report also called for CN to proceed with the expansion of its double-stack train service from Halifax and the establishment of an intermodal terminal in Halifax.

Carrier Strategic Alliances

CP Rail and BN entered into an agreement allowing to interline container traffic between there two systems.

Early in 1992, CP Rail and Burlington Northern Railroad (BN) came to an agreement respecting the interline movement of containers over routes operated between Canada and the U.S. on their respective lines. With the new agreement, BN can market its services into the central Canada markets of Toronto and Montréal. In return, CP Rail secured access for Canadian shippers in major U.S. markets presently served by the BN system.

The trend towards truck-rail alliances continued in the U.S.

In the U.S., joint truck-rail initiatives are a growing trend. J.B. Hunt Transport Services (J.B. Hunt), an Arkansas-based trucking firm, has agreements with seven U.S. railroads. The most recent agreements are the ones introduced in 1992 allowing the offer of container service with BN between Chicago and the Pacific northwest and the agreement with Conrail for the movement of containers between New York and Chicago. In 1991, J.B. Hunt rival U.S. trucker, Schneider National Inc., entered into an alliance with Southern Pacific Railroad to offer double-stack train service. In 1992, Schneider and the Union Pacific Railway (UP) also entered into a partnership to begin trailer-on-flat-car (TOFC) service to link the U.S. midwest with points in Mexico, Texas, northern California and the Pacific northwest. UP is the fifth railroad with which Schneider has announced operating agreements in the past year. Schneider also has agreements with Conrail, Norfolk Southern and Wisconsin Central for long haul movements. Schneider faced competition from J.B. Hunt in its home-base of Wisconsin.

In Canada, the trend towards joint truck-rail initiatives has yet to catch on. However, in early 1993, CN announced an intermodal strategic alliance with J.B. Hunt allowing for the transport of J.B. Hunt's trailers on CN rail flat-cars between Chicago, Toronto and Montréal. In addition, J.B. Hunt announced plans to purchase newly designed containers which can be stacked on rail cars or attached to dollies

(RoadRailer) for over-the-road use. This initiative made J.B. Hunt the first major trucking company to invest in domestic freight containers.

Intermodal Services

Shippers' Perspective

In carrying out its Shippers' Survey, the Agency asked shippers to rate their company's experience with intermodal transportation services in 1992 relative to 1991 in terms of the following factors:

equipment supply; equipment condition; frequency of service; service reliability; transit time; claims handling; carrier cooperation; documentation; and overall quality of service.

As in 1991, shippers reported an improvement in "overall quality of service", "carrier cooperation", "transit time" and "service reliability" in higher proportions (30, 26, 25 and 24 per cent respectively) than for any other factor.

Over the past five years, the Shippers' Survey results clearly indicate that shippers noticed improvements in intermodal services and that carriers' intermodal initiatives of recent years have not gone unnoticed by users.

For any given service factor, the number of responding shippers reporting some deterioration in 1992 over services provided in 1991 never surpassed four per cent for any of the service factors assessed.

In 1992, shippers reported lower average increases in intermodal rates than in 1991. These increases ranged from less than one per cent in domestic intermodal services to just over one per cent in international intermodal services compared to 0.8 and 1.8 per cent in 1991. For transborder services, an average rate increase of 0.2 per cent was noted in 1992 compared to 0.9 per cent in the previous year.

Of the shippers responding to the Agency's 1992 survey, 99 per cent used trucking services and one-half of these indicated moving some of their traffic with intermodal services. However, for most of them, intermodal movements accounted for only a small fraction of their total traffic. Seventy per cent of shippers using rail indicated moving intermodally some portion of their traffic, compared to 65 per cent of marine services users. In general, intermodal traffic accounted for less than 20 per cent of shippers' total traffic.

In submissions to NTARC and in written comments provided on the 1992 Shippers' Survey returns, Canadian shippers emphasized the importance of a customer-oriented marketplace. In relation to their international trade activities, shippers identified the need to improve port services through increased productivity and enhanced cost effectiveness.

Thirty per cent of shippers using intermodal services reported improvement in the overall quality of service.

Intermodal services continued to be used for small portions of shippers' total traffic.

Canadian shippers also emphasized the importance of careful loading and unloading of commodities and identified congestion at ports as one of their concerns.

Atlantic Canada shippers expressed concerns over the uncertainty surrounding the future of the Ports of Halifax and Saint John and over the ongoing erosion of liner services at Halifax and Saint John restricting their access to overseas markets by reducing the number of alternative routes available to move their products to markets.

Port Terminal Operators' Perspective

Port terminal operators are important elements in intermodal systems, managing their operations within the schedules of all other activities involved in the movement of goods. In fact, port terminals are vital links in the transportation chain related to trade activities; they are key interfaces in the transferring of cargo between surface modes and vessels at the port. For these reasons, port terminal operators are in a position to offer a unique perspective on intermodal services.

According to the Agency's 1992 Survey of Port Terminal Operators, over one-half of responding terminal operators reported that the modal combination of "rail/marine" was used most often to transport overseas freight to and from their terminals, followed closely by a "truck/rail/marine" combination. The survey also revealed that, in domestic and transborder trade, proportionately more operators handled cargo moving via a "truck/marine" combination.

The majority of port terminal operators found railways interested in competing for the traffic at their terminals.

In 1992, 56 per cent of terminal operators indicated that the railways were "interested" in competing for traffic moving through their terminals, with the other 44 per cent reporting that they were "indifferent" or "not interested at all". The majority of operators also felt that rail services to and from their facilities had either not changed or improved in 1992. The railways obtained "good" ratings from a majority of operators on the supply and condition of equipment and carrier's cooperation. On the other hand, larger proportions of responding operators rated as "acceptable" switching services, transit times, claims handling and overall quality and efficiency of service. When compared to other service factors, railways did not fare particularly well with regard to switching services. These services were considered "poor" by the greatest proportion of operators.

Port terminal operators also voiced concerns and made various suggestions with respect to rail services in an intermodal context. Some operators noted the high level of switching costs and stressed the importance of reliable and timely switching operations in minimizing delays and improving port terminals' competitiveness. One operator summed it up by saying: "Over the next one to three years, the competitiveness of Canadian inland intermodal routes (especially rail) will impact on throughput at our terminal. The railways' ability to

provide rates comparable to their U.S. competition will be crucial to increase volumes of Canadian cargo through [the port]."

Port terminal operators were generally satisfied with railways' services to their terminals.

Some operators were concerned with rail line abandonments that might result in a loss of flexibility in their terminal operations. Other operators mentioned poor grain handling methods and the impact on costs and delays. A number of operators also referred to the over-regulation of railways rendering them inefficient and uncompetitive, especially in the case of captive terminals. Finally, the heavy competition from U.S. ports and terminals was mentioned as a factor undermining the financial health of Canadian carriers. Some operators expressed their satisfaction with rail services to and from their facilities, specifically referring to better transit times between Canadian and American centres, new rail yard facilities and the introduction of new double-stack train services on Canada-U.S. routes.

The majority of terminal operators rated highly trucking service factors.

With respect to trucking services to and from port terminals, results of the Agency's survey showed that all responding operators either experienced no change or noticed an improvement in both truckload and less-than-truckload (LTL) services from 1991 to 1992. All responding operators reported LTL trucking services "good" or "fair" in 1992, equipment supply and frequency of service being the only factors rated poorly by a small minority of respondents. With respect to truckload services, an overwhelming majority of responding terminal operators rated all service factors "good" or "fair". Less than two per cent of operators rated service factors such as equipment supply and condition, frequency of service and transit time as "poor".

Written comments provided in the context of the 1992 survey questionnaire confirmed the high level of satisfaction of terminal operators with trucking services to and from their facilities. The following comment from one operator summarizes well the views expressed: "Trucking is, as always, steady!"

Carriers' Perspective

The recent move in the past few years towards globalization has demanded that transportation services between modes become more integrated and efficient. Surface transportation services have not been exempted from this trend and carriers have modified their operations to participate in the development of seamless transportation systems.

The introduction of double-stack container services translated into rail intermodal traffic growth.

Both railways have made considerable progress towards establishing and improving their continental rail networks throughout North America in the last two years. These developments have started to pay off as container traffic volume increased in 1992. The recent introduction of double-stack container services offers the potential for future growth of intermodal traffic.

A number of trucking firms offering intermodal services indicated using these services to balance the use of their trailer fleets in their operations. Carriers continued to be of the opinion that intermodal arrangements were more efficient on long-haul movements. Overall, carriers reported intermodal usage whenever such an arrangement met both carriers' needs.

Intermodal Traffic

Shippers

Based on the Agency's Shippers Survey results, the proportion of shippers reporting the use of intermodal transport services continued to increase from less than 40 per cent in 1988 to 45 per cent in 1992. The 1992 survey results showed a larger number of shippers increasing the proportion of their traffic moved intermodally. Survey results showed that domestic intermodal container services were more popular in 1992 than in the previous year.

According to survey results, the utilization of intermodal transportation services occurs in all industries. Yet it is more prevalent in some industries than in others. For instance, food products, plastic products, paper products, fabricated metal, chemical products and wholesale trade were the industries which had the largest number of shippers reporting the use of these services in 1992.

Railways

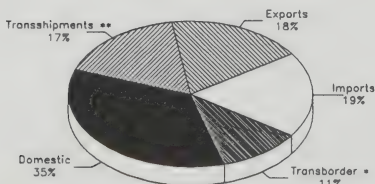
In 1992, intermodal rail traffic (i.e., containers and trailers-on-flat-cars) totalled 13 million tonnes, up 6.6 per cent from 1991. This contrasts with the three per cent drop experienced in total traffic moved by the two railways. As shown in Figure 7.1, intermodal rail traffic moved by CN and CP Rail was predominantly offshore container traffic. Domestic activities accounted for 35 per cent of total intermodal traffic while offshore traffic to and from Canada (including transshipments through Canadian ports), generated 54 per cent of all CN and CP Rail intermodal traffic in 1992. The remaining 11 per cent of intermodal rail traffic was transborder traffic.

Domestic intermodal rail traffic amounted to 4.5 million tonnes in 1992. Almost all domestic intermodal rail shipments involved traffic to, from or within central Canada, as shown in Table 7.1. Intermodal rail movements between the Prairie provinces and central Canada represented more than one-third of the total 1992 domestic intermodal traffic for the two major railways.

Over three-quarters of domestic intermodal traffic was carried on trailers-on-flat-cars (TOFC). Trailers-on-flat-cars remain the predominant way

Most of rail intermodal traffic involved overseas trade.

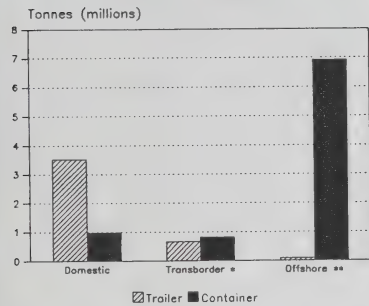
FIGURE 7.1
CN and CP Rail Intermodal Traffic
by Market



* Includes a small amount of U.S.-Canada-U.S. traffic.

** Includes offshore traffic to or from the U.S. through Canadian ports.

FIGURE 7.2
Distribution of Trailers and Containers
on Flat-cars by Market



* Includes a small amount of U.S.-Canada-U.S. traffic.

** Includes offshore traffic to or from the U.S. through Canadian ports.

FIGURE 7.3
Import/Export Intermodal Rail Movements
for 1992
(excluding transshipments)

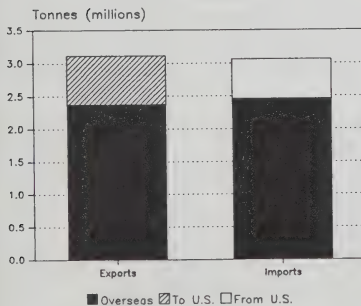


TABLE 7.1
CN and CP Rail Domestic Intermodal Traffic for 1992
(thousands of tonnes)

Origin	Destination				Total
	B.C.	Prairies	Central Canada	Atlantic Canada	
B.C.	0	80	389	10	479
Prairies	121	99	714	26	960
Central Canada	610	930	461	499	2,500
Atlantic Canada	6	16	416	118	556
Total	737	1,125	1,980	653	4,495

of handling domestic intermodal movements and to a lesser extent transborder shipments. Rail intermodal traffic to and from international markets moves predominantly in containers. The split between trailer and container traffic for each market is illustrated in Figure 7.2.

In 1992, 8.5 million tonnes of rail traffic moved intermodally either through or from Canadian ports, or to or from the U.S. Figure 7.3 shows the split between import and export intermodal traffic (excluding transshipments) for offshore and transborder traffic. Offshore exports amounted to 2.4 million tonnes, while intermodal rail traffic to the U.S. accounted for 0.7 million tonnes of traffic. Traffic destined to the U.S. from Canada, while small in terms of tonnage carried, was up by over 40 per cent in 1992. On the import side, offshore traffic in 1992 was 2.5 million tonnes, with an additional 0.6 million tonnes of traffic from the U.S. International intermodal rail traffic in 1992 was also comprised of 2.2 million tonnes of transshipped containers exported and imported through Canadian ports, but with origins or destinations in the U.S. Intermodal rail traffic of the two major railways originating from the U.S. and carried to Canadian ports for export amounted to 1.3 million tonnes in 1992; whereas, intermodal rail traffic arriving at Canadian ports but destined for the U.S. totalled 0.9 million tonnes. Almost all of this traffic moved through the port of Montréal. Also, there were 0.1 million tonnes of intermodal traffic carried in 1992 by the two railways, which followed a U.S.-to Canada-to U.S. routing.

Containers are used more and more for intermodal movements of goods ranging from bulk and break-bulk commodities to high-value merchandise such as electronic equipment. While containers are used mainly in international trade, they have also started to be used in domestic trade. As a percentage of intermodal rail freight carried by CN and CP Rail in 1992, containerized traffic represented 22 per cent of their total domestic intermodal tonnage, 56 per cent of their transborder tonnage, and almost all of their overseas traffic. Over one-fourth of the

8.7 million tonnes of containerized cargo moved by the two railways was tied to overseas trade through eastern Canada ports and was destined to or originated from central Canada. Central Canada, due to its industrial and demographic base and the location of export markets for its products, is the origin of a significant proportion of the movement of containerized rail traffic.

Ports

Ports are key components of the nation's intermodal transportation network, providing the necessary interface between inland rail and truck services and the international marine services that are essential to the movement of Canada's overseas exports and imports.

Traffic at Canadian ports declined by eight per cent in 1992.

According to figures reported by the Canada Ports Corporation (CPC), the total volume of traffic handled at CPC ports declined by 8.3 per cent to 167 million tonnes in 1992. Canada's seven major ports - St. John's, Halifax, Saint John, Québec, Montréal, Vancouver and Prince Rupert - accounted for 141 million tonnes of the 167 million tonnes handled at Canadian ports in 1992. Of these seven ports, only Montréal and Prince Rupert handled more traffic in 1992 than in 1991. A good part of the downturn in total port traffic can be explained by a decrease in coal shipments out of Vancouver as well as lower volumes of dry bulk commodities through Québec and Vancouver. Overall, the traffic handled at Canadian ports in 1992 reflected the relative performance and competitiveness of the Canadian economy as well as the economic environment prevailing in Canada's trading partners.

Although total container traffic handled at Canadian ports declined in 1992,...

Container traffic handled at the five major international Canadian container ports - Montréal, Vancouver, Halifax, St. John's and Saint John - declined by 2.3 per cent in 1992, with 12.3 million tonnes of containerized freight handled, compared to 12.6 million tonnes in 1991. The ports of Saint John, St. John's and Montréal maintained tonnage levels comparable to 1991, while Vancouver reported a 10 per cent increase in containerized cargo and Halifax a 19.6 per cent decrease.

...the ports of Vancouver and Saint John experienced a growth in their container traffic.

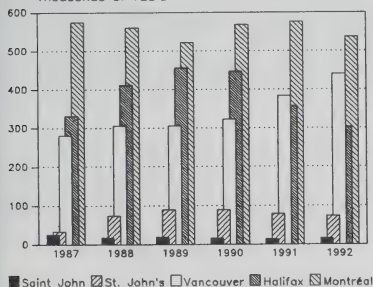
In terms of TEUs, throughput at CPC ports declined by 2.8 per cent from 1991. The five major Canadian container ports saw their combined total number of TEUs handled decrease by 38.9 thousand or 2.8 per cent in 1992. Increases in Vancouver and Saint John were not enough to offset the losses at three other ports. However, from 1987 to 1992, the combined throughput of containers in terms of TEUs at Canada's five major international container ports increased by 10 per cent.

Aggressive marketing and promotion by the port of Vancouver of its attributes vis-à-vis Canada's trade with Pacific Rim countries, including incentives such as a reduction in port costs to shipping lines making Vancouver their first port of call, have paid off handsomely. From 1987 to 1992, the port's TEU throughput steadily increased to peak at 441.1 thousand TEUs in 1992, an increase of 15 per cent from the

FIGURE 7.4

Container Throughput at Major Canadian International Container Ports

Thousands of TEU's *



* Includes: Loaded, Empty, Inbound, Outbound, Foreign and Domestic

The port of Halifax experienced a further decrease in container traffic.

383.6 thousand handled in 1991. With such a volume of container traffic, Vancouver was a close second to Montréal in terms of total container throughput.

The port of Montréal was still the busiest container port in Canada in 1992 with 537.3 thousand TEUs handled, a decrease of close to seven per cent from its 1991 traffic level. The re-routing of central Canada container traffic of two shipping lines previously calling Halifax through Montréal contributed, in part, to the port's slight increase in total traffic in 1992.

Container traffic at the port of Halifax totalled 302.4 thousand TEUs handled in 1992, a decrease of over 15 per cent from 1991 and 32 per cent from 1990. This steady decline can be explained to a great extent by the port's devastating traffic losses of 1991 when several shipping lines ceased calling Halifax as part of their rationalization programs of liner services to and from Canadian and U.S. east coast ports. However, while most of these changes were announced in 1991, some only took effect late in the year so that the full impact of these programs on the port's container throughput continued to be felt in 1992. The proliferation of west coast landbridge services to and from the Far East also resulted in further losses of vessel calls for the port of Halifax.

Container traffic at the port of St. John's appeared to stabilize to 1988 levels in 1992. After peaking at 89.5 thousand TEUs in 1990, the port handled 73.9 thousand TEUs in 1992, a loss of almost six per cent from 1991. Harsh economic conditions and a reduction in the number of vessel arrivals in 1992 may have contributed to the overall decline in activity at the port. Finally, on a much smaller scale, the port of Saint John handled slightly more container traffic in 1992 than in the previous year with a throughput of 15.8 thousand TEUs. This was an increase of approximately nine per cent over 1991 and half a per cent over 1990.

Competition/Cooperation

In the fall of 1991, the CPC's "Port Competitiveness Study" pointed out that ports and surface transportation partners needed to maintain existing cargo levels and to develop increased container traffic volumes in order to ensure their continued competitiveness. The study also identified the following as external factors contributing to Canadian ports' declining competitiveness: free trade (preference for North/South trade), more competitive U.S. routings and a more aggressive targeting of Canadian traffic by U.S. intermodal carriers.

Canadian ports depend on fast, efficient and competitively-priced surface transportation services to and from inland markets. Therefore intermodal bulk and general cargo systems must be coordinated to attract shipping lines to call at Canadian ports.

To achieve a strong Canadian transportation system, two important requirements must be met:

- the capacity of intermodal systems to handle cargo volume; and
- an efficient and cost competitive handling of cargo through the Canadian system.

Canada Ports Corporation and railways launched an initiative to promote the Canadian transportation system.

All components of the Canadian transportation network must function smoothly to provide for efficient, time-sensitive, "seamless" and cost-effective transportation. "Seamless" services require linkages between transportation entities.

Canada Ports Corporation, CN North America and CP Rail System launched *Advantage Canada*, in October, 1992, a two-fold initiative with the purpose of promoting a competitive seamless Canadian transportation system and ensuring quality improvement to that system.

The objectives of *Advantage Canada* are the following:

- cooperation between transportation entities;
- heightened awareness of the shipping community of long-term economic benefits of a Canadian routing;
- effective promotion of the Canadian option to the overseas shipping community;
- improving the competitiveness of the Canadian transportation system to attract international cargo; and
- enhanced quality to meet and exceed customers' expectations.

Despite some inroads made by major Canadian ports in recent years against their U.S. counterparts in the escalating battle for intermodal traffic, many Canadian shippers continue to move containers through U.S. ports.

Based on figures extracted from the Journal of Commerce's PIERS data base, Canada exported slightly more than 110,000 TEUs through U.S. ports in both 1991 and 1992. While containers imported through U.S. ports decreased by nine per cent from 1991 to 1992, over 140,000 TEUs were moved into Canada via the U.S. Although some U.S. cargo is transshipped through Canadian ports, timely data on these movements is not available.

Since 1989, Sea Land has consistently carried a significant proportion of such transshipments, capturing 20 per cent of the total in 1992. Sea Land, along with "K" Line, Maersk, Hanjin Merchant Marine, and American President Lines (APL) carried one-half of all containers to/

from Canada transshipped through U.S. ports in 1992. However, the relative importance of the top five lines in the total traffic transshipped through U.S. ports has decreased, from close to 80 per cent of imports in 1990 to 60 per cent in 1992, and from 60 per cent of exports in 1990 to a little more than 40 per cent in 1992. Five other major lines, NYK Lines, Mitsui-OSK, OOCL, Evergreen and Columbus Line carried another 20 per cent of transshipped Canadian containers in 1992. The remaining transshipped traffic was carried by over 150 other shipping lines.

The New York/New Jersey Port Authority, by far the most dominant on the U.S. east coast for Canadian transshipments, has consistently handled three-quarters of Canadian TEUs exported and imported through U.S. east coast ports since 1989. In 1992, New York and Philadelphia, the second major port on the east coast, handled 92 per cent of all import TEUs and 65 per cent of those exported from Canada via the U.S. east coast. Twenty-three other ports on the U.S. eastern seaboard also handled containers transshipped to and from Canada in both 1991 and 1992.

Tacoma and Seattle handled 85 per cent of imported and 70 per cent of exported Canadian container traffic through U.S. west coast ports in 1992. While Canadian containers moving through Seattle increased by 17 per cent from 47,000 TEUs in 1991 to 56,000 in 1992, Tacoma's share of Canadian transshipped boxes fell by 30 per cent from 93,000 TEUs in 1991 to 65,000 TEUs in 1992. Of the total transshipments at the two ports, two-thirds were imports, with exports accounting for the remainder. Seven other ports on the U.S. west coast handled containerized import and export traffic to/from Canada.

Canadian container traffic transported through U.S. Gulf coast ports accounted for a little more than one per cent (3,700 TEUs) of total transshipped TEUs in 1992; most of this traffic was handled at either New Orleans or Houston. Canadian shippers used a total of 14 U.S. Gulf ports in 1992, primarily for the movement of bulk and neo-bulk commodities.

Two-thirds of Canadian container traffic transshipped through U.S. ports were to or from Asia.

While Canadian shippers imported and exported cargo via U.S. ports to and from all major regions of the world, two-thirds of total transshipped containers originated in or were destined for countries in Asia (including the Middle East). The number of TEUs moved between Canada and Asia via U.S. west coast ports declined by 15 per cent from 1991 to 1992, partly due to the recessionary environment which prevailed in some Asian countries. Canada-Asia traffic accounted for 92 per cent of Canadian TEUs moving through U.S. west coast ports in 1992. More than one-half of TEUs moving through ports on the U.S. east coast in 1992 originated from or were destined for either Europe or Asia. Another 20 per cent was the result of trade between Canada and South America. Almost one-half of Canadian containers transshipped through U.S. Gulf ports were destined to or originated from the Caribbean and

Central America, while Canada's bulk commodities shipped through the U.S. Gulf were destined for Africa, Europe and South America.

The National Transportation Act Review Commission stated in its report that "intermodal services offer the most promising area for new growth in the transportation services sector". NTARC recommended that the importance of intermodalism be acknowledged in the National Transportation Policy statement contained in the *NTA, 1987* so that it becomes "an integral aspect of transportation policy".

It was brought to the Agency's attention that the figures reported in Tables 7.1 and 7.2 in the Agency's 1991 Annual Review report were inaccurate. The two tables should have read as follows:

TABLE 7.1
Transit Time and Distance by Rail

City (Railway)	Montréal		Toronto	
	Hours	Miles	Hours	Miles
Montréal (CP Rail)	-	-	10	337
Saint John (CP Rail)	18	477	33	814
Halifax (CN)	26	763	35	1,120
Philadelphia (D&H)	34	600	35	593
New York (Conrail/CP)	20	419	31	760

TABLE 7.2
Rail Links with Chicago

City (Railway)	Hours	Miles
Montréal (CP Rail)	37	900
Halifax (CN)	59	1,631
Philadelphia	66	1,184
Norfolk (N. Southern)	42 to 44	1,200

SAFETY

Highlights of 1992

Fatalities

With the exception of the rail mode, the number of reported fatalities by mode came down in 1992 in relation to the 1991 statistics. With the exception of two fatalities resulting from main track accidents, all rail-related fatalities reported in 1992 were the result of crossing accidents.

Accidents

The 1992 accident statistics reveal a decline compared to 1991 figures. The decline can be attributed partly to the lesser activity resulting from the lower demand levels.

National Highway Safety Code

While in some jurisdictions not all National Highway Safety Code standards are implemented, the issue related to the Code remains one not so much of implementation but of uniformity across jurisdictions in its enforcement.

The essential links enabling Canada's regions to be tied to each others come from the vast, technologically well-developed and efficient transportation system. The size and scope of the Canadian transportation industry continue to be dictated by various considerations such as geography, topography, demography and, of course, the structure of the country's economic activities. Given the complexity, diversity and magnitude of the country's transportation system and the importance placed on safety in the National Transportation Policy spelled out in the *NTA, 1987*, this section of the report summarizes by mode the safety-related information available for 1992.

Air Services

Safety aspects of Canada's air transport industry are governed by the *Aeronautics Act*. Comprehensive amendments to this legislation, made in 1985, were designed to provide continuing high standards of airline safety. In addition, the *Canadian Transportation Accident Investigation and Safety Board Act* of 1989 established an independent multi-modal agency, the Transportation Safety Board of Canada, to investigate transportation occurrences and make safety recommendations.

*Air Canada and Canadi*n reported no fatal accidents for the ninth consecutive year.*

The Board's 1992 statistics indicate that accidents, fatal accidents, and fatalities involving Canadian-registered commercial aircraft decreased to their lowest points since 1985. In 1992, 438 accidents occurred, 47 of which were fatal, resulting in 79 fatalities. Once again the two major airlines, Air Canada and Canadi*n, operated without a fatal accident for the ninth consecutive year.

Canadian legislation requires the reporting of certain types of "incidents", (i.e., occurrences other than accidents) which largely involve a loss of separation in air traffic control. In 1992, 671 incidents were reported, a decline for the second consecutive year.

Rail Services

Rail safety regulations in Canada are the responsibility of Transport Canada. However, it is the Transportation Safety Board of Canada which investigates rail transportation occurrences and makes safety recommendations.

The train accident rate and train accidents were down in 1992.

Preliminary data for 1992 and revised 1991 figures were provided by the Transportation Safety Board. The total number of train accidents (collisions, derailments and crossing accidents) decreased 6.7 per cent from 1991 to 1992. In 1992, the overall decrease in train accidents was due primarily to a 12.7 per cent decline in the number of terminal accidents. A decline of 8.1 per cent in crossing accidents also contributed to the overall drop in the number of accidents in 1992, while in contrast, main-track collisions and derailments increased by 15.7 per

FIGURE 8.1
Train Accident Rate
(Train Accidents per Train-Kilometre)

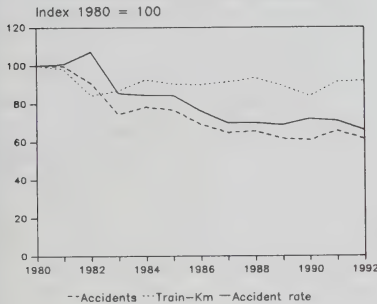


FIGURE 8.2
Train Fatalities by Region

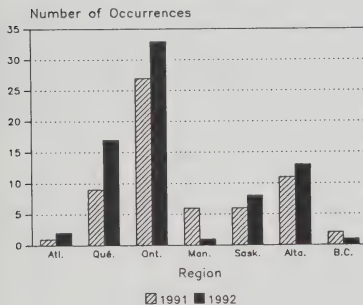
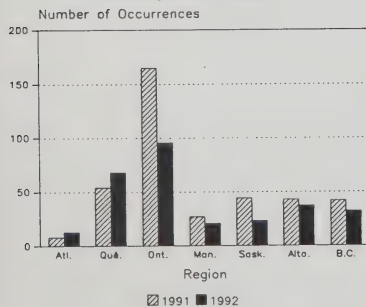


FIGURE 8.3
Train Injuries by Region



cent from 1991. The number of derailments increased from the previous year. The number of train accidents decreased in five of the seven regions, namely British Columbia, Alberta, Saskatchewan, Manitoba and Ontario. Atlantic Canada and Québec were the only two regions to report an increase in the number of train accidents.

The number of train-kilometres in 1992 was estimated to have increased by less than one per cent from 1991. Therefore, with fewer accidents in 1992, the number of accidents per million train-kilometres travelled decreased from 6.9 in 1991 to 6.4 in 1992. The 1991 accident rate was revised upward from the figure of 6.6 reported last year, as the result of a revision made to the total number of accidents reported. Figure 8.1 illustrates a twelve-year trend in train accident rates, also indicating train accidents and train-kilometres travelled. The number of train accidents has decreased almost 39 per cent from 1980 to 1992, while the accident rate declined by one-third over the same period.

The number of fatalities resulting from train accidents was 75, up from 62 in 1991. All 1991 train fatalities resulted from crossing accidents; however, in 1992, two fatalities occurred as the result of main-track accidents. Figure 8.2 shows the number of train fatalities for 1991 and 1992, by region. Fatalities resulting from train accidents increased in Alberta, Saskatchewan, Ontario, Québec and in Atlantic Canada, and decreased in British Columbia and Manitoba. As in 1991, the province of Ontario accounted for 44 per cent of total fatalities, with 33 crossing accident fatalities and two main-track accident fatalities.

In 1992, the number of train accident injuries declined significantly, 24.3 per cent from 1991. This decrease was the result of fewer main-track collision and derailment injuries, terminal collision and derailment injuries and grade crossing injuries. The number of main-track collision and derailment injuries reported the largest drop from 1991 to 1992, a decrease of 71 per cent or a total of 55 fewer injuries. It is also noteworthy that grade crossing injuries accounted for the majority of all train accident injuries, almost 83 per cent of the 1992 total. Train accident injuries are depicted by region in Figure 8.3 for the years 1991 and 1992. The number of train related injuries decreased over this period in British Columbia, Alberta, Saskatchewan, Manitoba and Ontario. Ontario experienced the largest overall drop in the number of train accident injuries, a total of 69 from the previous year. Between 1991 and 1992, injuries increased from eight to 13 in Atlantic Canada and from 54 to 68 in Québec.

During the year, CN North America won the U.S. National Safety Council's railroad public safety activities award, more commonly known as the "Golden Spike" award. Among the activities that helped CN earn the award were initiatives by its union-management Safety and Health Committees aimed at making young people more safety conscious, and participation with the chemical industry in a program for the safe movement of hazardous goods.

The National Safety Code is still not fully implemented in all jurisdictions.

Trucking Services

As indicated in the trucking section of the report, the reverse onus entry test - the last major economic regulatory barrier to entry into the extra-provincial trucking industry - was removed on January 1, 1993. In its place, a national safety fitness test has been introduced, a test which requires both new entrants and present carriers to meet the legislated safety requirements of the National Safety Code and to comply with highway safety and dangerous goods legislation. This requires knowing the safety standards, practices and procedures in each jurisdiction served.

The new safety fitness test adopted for entry into the extra-provincial trucking market is predicated on the National Safety Code (NSC), a code which came into effect on January 1, 1988. The provinces and territories are responsible for the enforcement of the standards, and some standards have still to be implemented in some jurisdictions. Marginal changes to the compliance status of the National Safety Code Standards occurred between the end of 1991 and the end of 1992: in P.E.I. and N.B., the facility audit standard was put in place, while the Northwest Territories have complied with the hours of service standard. The status of implementation of the code by all jurisdictions as of the end of 1992 is provided in the accompanying chart (page 173).

Hours of service regulations issued with the *MVTA, 1987* were, initially, basically in line with the U.S. rules, restricting a driver to 10 hours of driving time within a 15 hour work period. Further restrictions over a seven day and an eight day cycle were included, as well as permits to extend the driving time by up to two hours twice in a seven day period. These restrictions immediately posed several problems.

Revised regulations were issued in June of 1989 which increased driving time to 13 hours within a 15 hour work period, removing the additional two hour exemption. For greater flexibility, restrictions over a 14 day period were introduced with a mandatory 24 hour rest and recovery period before completing 75 hours of on-duty time. The revised regulations had the disadvantage of not conforming with U.S. standards. The new regulations were also found to be complex and cumbersome, and the industry lobbied for simplicity and greater flexibility.

A task force within the CCMTA, comprised of provincial and territorial jurisdiction officials, was struck to examine the issue of hours of service and an interim report was produced in November, 1992. The Ontario Trucking Association conducted its own Hours of Work study, the results of which were recently endorsed by the CTA and the provincial trucking associations (see box). The recommendations of that report will be presented to the CCMTA Task Force.

Ontario Trucking Association Proposed Hours of Work Regulations

- The 120/14 cycle be dropped in its entirety from the regulation;
- The 240/28 cycle not be considered further and should not be included in the revised legislation;
- The ability to switch cycles be retained;
- The allowable per shift drive time should remain at 13 hours;
- The so called "36 hour reset" rule be a primary feature of the revised hours of work regulation;
- Meal breaks be classed as off-duty time;
- Existing sleeper berth rules be retained;
- Physical participation in loading and unloading should be classed as on-duty, not driving time.

Meanwhile, in the U.S., hours of service were also the subject of a debate. A recommendation was made to increase driving time by up to 50 per cent, provided that a 24 hour recovery period was included after

National Safety Code Standards: Compliance at the End of 1992

NSC Standard Number	Standard Name	Currently in Place	Jan '93	Mar '93	Apr '93	Oct '93
5	1. Self Certification Standards and Procedures	BC, Alta, Sask, Man, Ont, Qué, NS, NB*				
15	2. Facility Audits	all others PEI	Man		Qué	
7	3. Driver Profile Carrier Profile	all jurisdictions all others			Man, NB	
8	4. Criteria for Short Term Suspension (Sask, Nfld - not yet decided)	Man, NB, Alta, BC*, NWT, Qué*				Yuk
NIL	5. Interprovincial Record Exchange	all 12 jurisdictions				
9	6. Hours of Service	all others		Sask		Yuk
11	7. Commercial Vehicle Maintenance Standards	all others	PEI		NB	
12	8. CVSA - On Road Inspections	all 12 jurisdictions				
14	9. Carrier Fitness Entry and Control Criteria	all others, Man*				
13	10. Trip Inspection Report (no documentation required in Alta)	Ont, Qué, NS, PEI, Alta, NWT, Nfld, Yuk*, BC			Sask, Man, NB	
1	11. Single Driver Licence Concept	all 12 jurisdictions				
4	12. Classified Driver Licence System	all 12 jurisdictions				
6	13. Medical Standards for Drivers	all 12 jurisdictions				
10	14. Security of Loads	all other jurisdictions	PEI	Sask		
2	15. Knowledge and Performance Test	all 12 jurisdictions				
3	16. Driver Examiner Training Program	all 12 jurisdictions				
16	17. First Aid Training (excl. Sask. and Qué.)	all other jurisdictions				

* Denotes a standard partially in place

60 hours of work. The U.S. government backed down from the recommendation as it was not convinced that the implementation of the recommendation was conducive to safety. The U.S. DOT decided instead to wait for the completion of a three year driver fatigue study before considering the question again.

Marine Services

Fewer marine related accidents were reported in 1992 than in 1991.

Preliminary statistics from the Transportation Safety Board of Canada revealed that shipping accidents and accidents aboard ships decreased by 24 per cent between 1991 and 1992. Shipping accidents, which account for approximately 80 per cent of all marine accidents, decreased by 21 per cent in 1992 from 1991. The 34 per cent decline in accidents aboard ships was largely due to a change in reporting requirements which reduced the number of reported accidents in the last half of 1992. Lower levels of shipping and fishing activities during 1992 also contributed to the decline in marine accidents. No preliminary statistics were available on a regional basis at time of writing.

Preliminary statistics also indicated that fatalities as a result of shipping accidents and accidents aboard ships decreased from 21 in 1991 to 19 in 1992. The number of vessels lost due to marine accidents also decreased from 19 in 1991 to three in 1992.

The number of marine incidents filed with the Transportation Safety Board increased from 175 in 1991 to 224 in 1992. The 27 per cent increase was due, in part, to changes in reporting requirements which led to a higher number of reported incidents regarding close encounters between commercial vessels and pleasure craft.

It should be noted that neither the enactment of the *NTA, 1987* nor the *SCEA, 1987* have modified existing safety provisions set down in such statutes as the *Canada Shipping Act*, the *Arctic Waters Pollution Prevention Act* and the *Transportation of Dangerous Goods Act*.

EMPLOYMENT

Highlights of 1992

Level of Employment

The total number of employees in the four modes of transportation covered in this review dropped by 3.6 per cent.

Weekly Earnings

Rising unemployment slowed wage increases in Canada in 1992, yet growth in earnings in both air and marine transportation was higher than the national average.

Wage Settlements

In 1992, key agreements were reached between the railways and unions to reduce the size of rail crews from three to two on certain trains across Canada.

Strikes and Lockouts

In the transportation sector, there were fewer workers involved in and person-days lost due to strikes and lockouts in 1992.

Introduction

This section of the report examines the changes in the level of employment in 1992, in the transportation industry as well as certain aspects of labour-management relations in 1992. It should be noted that labour statistics provided by Statistics Canada in the four previous reviews were based on 1970 Standard Industrial Classification (SIC) codes. The classification of industries has been revised and the data is now based on 1980 SIC codes. This change in classification, which affected the distribution of industries among major sectors of activities, has resulted in changes in some of the trends reported in past reviews. Appendix E presents revised figures for the period 1983 to 1992 and provides the basis for much of the analysis in this section.

In the transportation sector, carriers introduced cost-cutting measures in an effort to improve their economic viability in 1992. Carriers attempted to remain competitive, or in some cases restore their competitiveness, in the transportation industry by reducing labour costs, streamlining management and, where possible, introducing new technologies.

Level of Employment

Total employment continued to decline in Canada in 1992.

Although Canada's economic recovery appeared to be under way in 1992, its pace was slow and uneven. Canadian labour markets continued to remain weak as economic growth was not strong enough to overcome the impact of cost-cutting and productivity initiatives introduced to restore profitability. As a result, employment in Canada declined by 279,600 jobs in 1992, a 2.7 per cent decrease from 1991. Mining, manufacturing and construction bore the brunt of these declines. Although the rate of decrease in transportation slowed significantly in 1992 (2.3 per cent) compared to 1991 (7.5 per cent), the marine (11.8 per cent) and air-related industries (11.1 per cent) posted heavy losses. After severe cuts in the trucking industry in 1990 and 1991, increases in Québec, Saskatchewan and Alberta helped slow down the overall decline in 1992. The rail industry showed only a marginal reduction in employment in 1992.

The four modes covered by the Annual Review continued to account for over 60 per cent of total transportation employment. Their share of total employment has decreased over the last ten years from 3.4 per cent in 1983 to 2.6 per cent in 1992.

In its ongoing effort to reduce costs and offset losses, the railways continued to reduce staff in 1992. Compared with the 6.9 per cent reduction in staff in 1991 however, the decrease in employment was minimal. Throughout the year, agreements were reached to cut crew sizes on most freight trains in Canada, decisions were made to consolidate crew management centres and a number of rail lines were

In the transport sector, the marine industry recorded the most significant reduction in employment.

targeted for abandonment. At year-end CN introduced a cost-cutting plan which included further reductions in staff over the next three years. According to this plan, CN intends to eliminate up to 10,000 positions, reducing its work force by one-third. CP Rail also announced its intention to reduce its workforce over the next two years.

Between 1987 and 1990, employment in the air sector experienced some growth. Although the continued losses in the air industry in 1991 and 1992 resulted in annual staff reductions of 9.5 per cent and five per cent respectively, employment levels still remained higher than in 1987. In particular, air-related industries, providing support services to the air transport industry, were hit hard by employment cuts in 1992.

For the third consecutive year, the marine industry posted a decline in employment. The number of people employed in the marine sector dropped dramatically in 1992 (11.8 per cent) from the previous year.

The continuing increase in unemployment has affected almost all the provinces in Canada. A regional comparison of transportation employment levels shows that Saskatchewan and New Brunswick were the only provinces that recorded an increase in employment. Job losses ranged from 0.4 per cent in Alberta to 9.7 per cent in British Columbia.

Wage Settlements and Earnings

Weekly earnings within the transportation sector increased at higher rate than inflation.

As a result of rising unemployment, wage increases slowed to 3.4 per cent in 1992. Unlike 1991, the increase in weekly wages in the transportation sector was lower than the national average. Below average increases were also recorded in forestry, mining, construction, retail trade and public administration.

Within the transportation sectors, the earnings growth in 1992 increased only 2.2 per cent. Increases ranged from 2.9 per cent in the rail industry to 4.1 per cent in the air industry. The marine and trucking industries recorded increases of 3.5 and 3.3 per cent respectively.

A modal comparison over the period 1983-1991 has shown that trucking usually had the lowest increases in average weekly earnings of the four modes. In 1992 however, the increase in average weekly earnings in trucking was higher than the average increase for both the rail industry and the overall transportation sector. In the trucking sector significant increases in earnings were noted in New Brunswick (6.2 per cent), Manitoba (five per cent), Alberta (9.8 per cent) and British Columbia (10 per cent).

A regional comparison of weekly earning increases within the transportation sector in 1992 with the overall national average increase of 3.4 per cent for all industries, reveals a higher rate of increase in British Columbia (6.7 per cent), Alberta (3.7 per cent), Prince Edward

Island (10.4 per cent) and Yukon (five per cent). A lower rate of increase was reported in Ontario (1.5 per cent) and Nova Scotia (3.3 per cent). Increases in weekly earnings in transportation in Québec were negligible.

TABLE 9.1
Percentage Increase in Consumer Prices and Wage Settlements

	Consumer Price Index	Wage Settlement Increase	
		Transportation and Communication	All Industries
1986	4.2%	3.3%	3.5%
1987	4.4%	3.1%	4.1%
1988	4.0%	3.6%	4.3%
1989	5.0%	4.5%	5.3%
1990	4.8%	5.7%	5.6%
1991	5.6%	3.5%	3.6%
1992	1.5%	2.7%	2.1%

A number of key wage settlement contracts affecting approximately 59,000 transport employees were signed in 1992. The most significant of these were:

In 1992 there were a total of 1,309,200 employees covered in the 482 settlements that were reached.

- Council of Marine Carriers - licensed and unlicensed employees (separate settlements);
- VIA Rail Canada Inc. - yardmen, service and maintenance employees, carmen (separate settlements);
- CN - electricians, firemen, office and maintenance of way employees, conductors and other employees, traffic controllers and dispatchers, carmen, trainmen and yardmen (separate settlements);
- CP Rail - electricians, firemen, service employees, machinists, clerks and brakemen, conductors (separate settlements);
- Highland Transport (Division of Canadian Pacific Express and Transport Ltd) - drivers;
- CP Express and Transport - drivers and warehouse employees;
- St. Lawrence Seaway Authority - operational maintenance employees;
- Marine Atlantic - terminal employees, unlicensed personnel (separate settlements);
- Cargill Ltd., Manitoba Pool Elevators and others - grain elevator employees.

Many of the key settlements reached in 1992 involved the rail industry. Both CN and CP Rail negotiated agreements with a number of unions on new two-year contracts. These agreements increased wages by three per cent annually and improved benefits. The ratifying of a new five-year contract between the International Longshoremen's Association and the Maritime Employers' Association was also an important settlement in 1992. It is anticipated that this agreement will aid in increasing the intermodal traffic at the Port of Halifax.

There were also a number of other important settlements in transportation under negotiation in 1992. They involve the following firms/groups:

- CN;
- Air Canada;
- Canadian Airlines International;
- Purolator Courier Ltd.

Strikes and Lockouts

Transport strikes and lockouts continued to decline in 1992.

The overall number of strikes and lockouts reported in 1992, as well as the number of workers involved, declined in the transportation industry. However, water transportation, while experiencing fewer strikes in 1992, lost more person days. Although there was only one rail strike in 1992, the Ontario Northland Railway, there were other strikes that had an impact on the rail sector; for example, the labour disputes at two British Columbia coal mines severely reduced CP Rail's coal traffic.

In 1990, in an effort to avoid multiple strikes by different unions and to erase job distinctions, CN and CP Rail requested the amalgamation of a number of unions representing approximately 11,700 workers by the Canada Labour Relations Board. In 1992, after 26 months of hearings and deliberations, the Board ruled in favour of the railways and ordered seven unions to amalgamate. The unions involved were:

- International Association of Machinists and Aerospace Workers;
- International Brotherhood of Electrical Workers;
- International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers, and Helpers;
- United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada;
- Sheet Metal Workers International;
- International Brotherhood of Firemen and Oilers;
- Canadian Auto Workers.

Further hearings have been scheduled on the request of CN and CP Rail to have operating unions amalgamate. The railways indicated that such amalgamations would allow the companies to run more efficiently by reducing the jurisdictional disputes between unions.

ACCESSIBLE TRANSPORT SERVICES

Highlights of 1992

Agency Inquiries

The level and adequacy of accessible services offered to persons with disabilities on extra-provincial motor coaches was the object of an extensive Agency inquiry in 1992. An interim report on the availability of accessible ground transportation services at Canadian airports was released at the end of the year. The final report on the level of accessibility of federally-regulated ferry services, which contains proposed accessibility standards, was released at the end of the year.

NTA Regulatory Initiatives

Regulatory proposals dealing with terms and conditions of carriage of passengers with disabilities by Canadian carriers in large aircraft, and minimum training standards for transportation personnel were published in Part I of the *Canada Gazette* for public comment. The Agency approved a regulatory proposal with respect to the provision of an additional seat for an attendant of a passenger with a disability for travel in large aircraft within Canada.

Federal Commissions Promote Accessibility

The Royal Commission on National Passenger Transportation made a number of specific recommendations towards achieving a more accessible passenger transportation system and that the Agency take on an expanded role in this regard.

The National Transportation Act Review Commission's recognized that although persons with disabilities had benefitted from the provisions of the *NTA, 1987* there was still additional work to be undertaken. The Commission recommended the federal government actively pursue the passage of regulations promoting access to transportation services for persons with disabilities.

Inquiries

The Road to Accessibility: An Inquiry into Canadian Motor Coach Services

At the request of the Minister of Transport, the Agency carried out an inquiry into the accessibility of extra-provincial motor coach services to persons with disabilities.

Pre-consultations were held in the first quarter of 1992 with all major stakeholders. Public hearings took place in 17 cities throughout Canada in the spring and fall of 1992, where 180 presenters had the opportunity to address the issues directly. The hearing panel consisted of the Honourable Erik Nielsen, the Chairman of the Agency, and Maître Nicole Forget the member responsible for accessible transportation matters, with other members participating on a rotating basis. Two temporary Agency members, Dr. Jacques Voyer and Ms. Patricia Danforth, brought to the inquiry their knowledge on issues of concern to persons with disabilities. Rick Hansen, a leader in the community of persons with disabilities, assisted with the hearings and the report.

The Report of the Inquiry was released in May, 1993, recommending that the federal government implement a national standard to make extra-provincial motor coach services accessible to people with disabilities. It also recommended that the costs of implementing the standard be shared, i.e., that the federal government assist the industry with the capital costs and the industry assume responsibility for additional operating costs.

The Agency recommended that the national standard cover terms and conditions of travel to ensure the provision of uniform services to passengers with disabilities; training of motor coach staff to ensure proper understanding of the travel requirements of people with disabilities and the provision of appropriate services; accessibility features on motor coaches, such as built-in boarding devices and securement places for wheelchairs; features to make coaches more accessible for travellers with cognitive and sensory disabilities; and accessibility of motor coach terminals.

The report advocated immediate change to services and training, and suggested equipment-related requirements apply to all new coaches ordered, purchased or leased after January 1, 1995. It recommended that motor coach operators with fleets of 10 coaches or more be required to have 10 per cent of its equipment meet accessibility standards by 1998, with all equipment used in scheduled services complying by the year 2007 (or within 12 years). For terminals, the Agency recommended that all new terminals constructed after 1995 be accessible and existing terminals be modified by the year 2000.

Ground Transportation Services at Canadian Airports

The Agency initiated, in 1991, an inquiry into whether the equipment and services offered by automobile rental agencies, taxis, limousines and airport shuttle buses operating at or from Canadian airports constitute undue obstacles to the mobility of persons with disabilities.

Persons, groups and associations of persons with disabilities, transportation companies and airport authorities were consulted between November, 1991 and June, 1992. In December, 1992, the interim report of the inquiry was released in order to solicit comments from interested persons. The report contains recommendations on the provision of hand controlled rental vehicles, the availability of accessible taxis and limousines and accessible buses at airports. The interim report will be revised to reflect comments received and then submitted to the Agency for consideration in the spring of 1993.

Ferry Inquiry

The interim report of the inquiry initiated by the Agency in 1991 to determine the level of accessibility of federally-regulated ferry services was released in January, 1992. It was circulated to all interested parties for comments. The revised report reflecting comments was submitted to the Agency and the final report was issued. As a result of this Inquiry, Transport Canada granted funding to Northumberland Ferries Limited to "retrofit" the MV Prince Nova to improve its accessibility for the 1992 season. Moreover, proposed accessibility standards included in the report are being incorporated into the Agency's regulatory program.

Regulations

Terms and Conditions of Carriage in Large Aircraft

These proposed regulations establish the services to be provided to persons with disabilities by Canadian carriers on their domestic services offered with large aircraft (30 or more passenger seats). These services to be offered by carriers include: assistance in boarding and deplaning; transfer to wheelchair provided by the carrier and to the seat of the aircraft; carriage of mobility aids at no charge; the disassembling and reassembling of mobility aids; and carriage, without charge, of a service animal in the cabin of the aircraft.

This proposal was published in the *Canada Gazette* on March 21, 1992 for public comment. Following publication, numerous comments were received from the public, industry and other interested parties. Revised regulations will be submitted for final government approval in 1993.

Training Standards for Transportation Personnel

These proposed regulations will establish minimum training standards for proper assistance of persons with disabilities by transportation personnel under federal jurisdiction, which includes carrier personnel and personnel employed in transportation premises and facilities.

This regulatory proposal was also published in the *Canada Gazette* on March 21, 1992 for public comment. The Agency is currently reviewing public comments and it is expected that a revised proposal will be submitted for government approval in 1993.

Air Fare for Attendants of Persons with Disabilities

This regulatory proposal will ensure that all carriers operating large aircraft (30 or more passenger seats) will consistently apply terms and conditions regarding the provision of an additional seat for an attendant of a passenger with a disability for travel within Canada.

At the request of the Minister of Transport, the Agency has consulted with the industry and groups representing persons with disabilities on Agency proposals regarding air fare for attendants. A revised regulatory proposal was approved by the Agency in November 1992 and was released to the Privy Council Office (Justice) for review. It is expected that this revised regulatory proposal will be submitted for government approval to publish for final public comment in the summer of 1993.

Amendment to the NTA, 1987

The *NTA, 1987* was one of six federal statutes amended by an omnibus bill to strengthen the rights of Canadians with disabilities in a number of priority areas including transportation. Receiving Royal Assent in June 1992, the bill amended the *NTA, 1987* by adding the words "accessible" and "persons with disabilities" to the Act's declaratory clause. With the amendment, the needs of travellers with disabilities are an integral part of the National Transportation Policy.

Agency Decisions on Accessibility

In 1992, the Agency received 41 complaints concerning undue obstacles to the mobility of persons with disabilities. In addition, the Agency carried over 11 complaints from 1991. Half of the complaints dealt with air transport, 33 per cent dealt with ground transportation and 17 per cent with ferry services and terminals in all modes. The Agency found undue obstacles in two cases, decisions were issued and operators were ordered to correct the situation.

In one decision, the Agency determined that the inadequate treatment provided by the air carrier to the complainants constituted an undue

obstacle to mobility. The Agency made sure that appropriate measures would be taken and improvements be made to prevent a recurrence of the incident.

In another decision, the Agency determined that the lack of assistance given by a carrier to a passenger with disabilities constituted an undue obstacle. This lack of assistance to the complainant raised a number of questions regarding responsibility for the provision of services and particularly boarding/deplaning procedures for passengers with disabilities.

Complaint resolution is an open window on the difficulties constantly encountered by persons with disabilities when they travel. Whether the problem is equipment or attitude, the information received by the Agency from interested persons during the pleadings contributes to a better understanding of the problems currently experienced and to the identification of correcting measures for the longer term. In cases of repeated complaints, the issue is whether or not the complaints result from systemic problems and whether solving identified problems requires regulations. This activity can also lead to the resolution of informal complaints and mediation between carriers and passengers with disabilities.

Public Liaison

The Agency pursued an active program of public liaison and education to make the Agency's accessible transportation program better known to persons with disabilities.

The Agency continued to be one of the active members of the working group responsible for coordinating the federal exhibition at Independence 92 held in Vancouver last April. Independence 92 was an international congress and exposition on disability hosted by Canada to commemorate the end of the United Nations decade of disabled persons. The Agency had an exhibition at the conference featuring a videotape entitled Moving in the Right Direction.

In June, 1992, the Agency participated at the Sixth International Conference on Mobility and Transport for the Elderly and Handicapped Persons in Lyon, France.

Agency officials also participated in numerous exhibitions and public speaking activities across the country. Also, the Agency responded to numerous requests for information about the accessible transportation program, distributing more than 7,500 brochures, inquiry reports and discussion papers; all documents were also made available in braille, large print and audio-cassette.

Appendix A

[This Appendix presents a summary of transportation's regulatory reforms. The summary is taken from the Agency's 1991 Annual Review report.]

Regulatory Reform

Canada's new transportation laws stress competition and market forces.

The *National Transportation Act*, 1987, (NTA, 1987), the *Motor Vehicle Transport Act*, 1987 (MVTA, 1987) and the *Shipping Conferences Exemption Act*, 1987, (SCEA, 1987) constitute Canada's new transportation laws. These new laws are intended to promote a more dynamic and competitive environment for transportation services through a greater reliance on competition and market forces. To achieve this objective, the laws establish a simpler regulatory system to reduce economic regulation.

Entry/Exit

Air Services

A carrier must apply to the National Transportation Agency (Agency) for a licence to operate a commercial air service. An applicant no longer has to prove that the proposed service is and will be needed by the "public convenience and necessity". This test has been replaced. Entry requirements differ for domestic air services in southern and northern Canada.

Applicants must meet "fit, willing and able" entry requirements to obtain a licence to operate an air service in Canada. First, the firm must be Canadian. That means it must be owned by a Canadian citizen or permanent resident (at least 75 per cent of the voting interests must be owned by them) and it must be controlled in fact by Canadians. Second, the applicant must have an operating certificate that shows the firm can safely operate an air service. Third, the applicant must have the liability insurance coverage required by the Air Transportation Regulations.

With a southern Canada licence, you can operate wherever and whenever you wish, and with the aircraft of your choice, provided the points served are within southern Canada. The licence gives the licensee authority to offer scheduled or charter services or a mix of scheduled and charter services.

For a new or amended licence to provide service to, from or within northern Canada, the old law required the applicant to demonstrate that the service is needed. Now those opposing the application must show that the licensing of a new carrier or the granting of a new licence would lead to a significant decrease or instability in the level of air service in the area. This entry

requirement is referred to as the "reverse onus entry test". Licences for services within northern Canada are still subject to abiding terms and conditions, stating points or bases that can be served, group of aircraft to be used and type of service (charter or scheduled) to be operated.

A carrier that has provided domestic air services at least once a week for six months or more, must give advance notice of at least 120 days before reducing the service to less than one flight a week or eliminating it totally.

Rail Services

To construct a line, a "public convenience and necessity" certificate must be obtained. To operate a service on an existing line, a "fitness" certificate must first be obtained, a process that requires the applicant to demonstrate the safeness of the proposed operations and the adequacy of insurance coverage, a step which is then followed by the issuance of Letters Patent.

To sell, lease or convey a line to a new operator, a railway no longer has to apply first for abandonment. Instead, the railway has to give public notice of the agreement to convey prior to obtaining the Agency's approval of the conveyance. If a line that is the subject of an abandonment application or under a Governor-in-Council protection order has a potential acquirer, the Agency must order the transfer, unless it is against the public interest, at a price agreed to by the railways and the buyer. If the two parties disagree on the price, the Agency will set a price at the net salvage value of the line, if requested to do so.

To abandon any federal railway line, an Agency abandonment order, issued within a time-constrained process, is required. The Governor-in Council no longer has the power to protect branch lines from abandonment consideration, but it may vary or rescind Agency's abandonment decisions upon application; the Agency may also postpone previously fixed abandonment dates. If a line is ordered retained, the railway can file a claim with the Agency for payment of the actual loss attributable to the operation of an uneconomic line. The Minister can provide, upon application, financial assistance to shippers affected by an abandonment decision to help them adjust their facilities to accept alternative transport services.

Motor Vehicle Services

The delegation of federal responsibilities for the regulation of extra-provincial trucking and bus operation to the provinces was continued but all provinces had to adopt a specific process. If provincial responsibilities over intra-provincial trucking and bus operations were retained, the terms and conditions of intra-provincial and extra-provincial regulations must be the same.

Trucking companies are still required to apply to each provincial board to obtain an extra-provincial licence. The applicant now has to prove that it is "fit"; fitness has been defined by the Governor-in-Council. Once fitness is

demonstrated, the provincial board grants the licence unless an objector can prove that the proposed service will be detrimental to the public interest. This entry test, referred to as a "reverse onus test", is to be replaced after five years (or more if ordered by Cabinet) by a "fitness test".

Marine Services

Ocean shipping lines can decide on whether or not to join conferences. Lines joining a conference operate under an agreement that covers mostly tariff matters as well as terms and conditions of services. Such agreements are exempted from the provisions of the *Competition Act* as long as member lines meet the requirements of the *SCEA, 1987*. The agreement may define, among other things, the admission to and the expulsion from the conference.

In January 1988, Part V of the *NTA, 1987* replaced the *Transport Act* as the relevant statute regulating the movement of resupply goods by water and the licensing of tug and barge operations on the Mackenzie River, in the Western Arctic and on Lake Athabasca. Part V also streamlined the licensing process, permitting the issuance of licences on an indefinite rather than an annual basis, and the licensing of total carrier capacity as opposed to individual pieces of equipment. Other provisions allowed for the transfer of marine resupply licences and increased the emphasis on shippers' support in the Agency's evaluation of a northern marine resupply licence application. Movements of national defence cargo and cargoes in support of the development of non-renewable resources in the North were deregulated under Part V, leaving the Agency to licence only those marine carriers providing resupply services essential to the viability of remote communities. Bulk fuel movements in the Western Arctic, which had not been previously regulated, are now deemed community resupply cargo and, therefore, subject to regulation.

The repeal of the *Transport Act*, as a result of the enactment of the *NTA, 1987* also eliminated the licensing requirements for carriers providing common carriage package freight service by water using vessels exceeding 500 gross registered tons between ports on the Canadian Great Lakes and the upper St. Lawrence River.

Fares/Rates/Tariffs

Air Services

Domestic air tariffs no longer have to be filed; they only have to be published and a copy retained at the airline's office for at least three years. Confidential contracts between a carrier and a person are permitted but copies must be retained for at least three years at the airline's office.

For southern Canada services, the Agency will review, on complaint, increases in basic passenger fares on monopoly routes. In the North, the Agency will review, on complaint, both the basic fare level or an increase in the said fare. In both areas, the Agency may order the carrier to roll back

the increase or level if it is found to be unreasonable. Refunds can also be ordered against the carrier as part of this process.

Rail Services

The *NTA, 1987* defines approaches whereby railways and shippers can make various types of rates but rates charged by railways must be compensatory. Railways still have to publish tariffs without having to file them with the Agency, so as to make them available to the public. They have to keep a record of the tariff for at least five years after its cancellation. Increases require 30 days advance notice while reductions become effective immediately.

The legislation now allows railways and shippers to negotiate confidential contracts defining rates and transportation conditions agreeable to both parties. It is no longer possible for railways to set rates collectively.

The legislation also introduced various methods whereby shippers can obtain competitive access to other railways. For instance, railways can be ordered to interswitch railcars under regulated (and compensatory) rates or to connect. Interswitching limits have been extended from 6.4 kilometres to 30 kilometres. For shippers located beyond the 30 kilometre interswitching limit, it is possible, in specific circumstances, to request an extension of the interswitching limit. If circumstances do not allow the extension, then they can obtain a competitive line rate to move their traffic to the nearest interchange point for transfer to a competing railway.

A railway can agree, in a published contract, to move a commodity at a specified rate (with no volume discounts) in return for the shipper's commitment to provide a given proportion of its traffic. Such a published contract is referred to as an agreed charge. Railways continue to have to agree on a joint rate for traffic moving on two or more carriers' lines. If no such agreement is reached between the carriers, the Agency can set the rate.

Motor Vehicle Services

Extra-provincial trucking rates are no longer regulated. Prior to January 1, 1988, filing requirements and prior approval were imposed by some provinces while others had no rate regulations.

Marine Services

As previously indicated, in order for shipping conferences serving Canada to have certain practices exempted from the provisions of the *Competition Act*, they must file their agreements and information concerning rates charged and conditions of service with the Agency. Non-conference shipping lines do not fall within the scope of the *SCEA, 1987* and are, therefore, not subject to the Act's filing requirements. The *SCEA, 1987* introduced a number of features clarifying and narrowing exemptions enjoyed by conferences and increasing the scope for price competition among member lines of

conferences. These include the mandatory right of conference member lines to take independent action (I/A) on rates and conditions of service and the treatment of the use of confidential service contracts by conferences and their member lines as an exempted practice. Moreover, the *SCEA, 1987* now prohibits conferences from demanding a commitment of 100 per cent of a shipper's cargo under a loyalty contract. The *SCEA, 1987* also implicitly exposes previously protected agreements between conference and non-conference lines to the *Competition Act*. Unlike its predecessor, the *SCEA, 1987* expressly forbids conferences from collectively negotiating freight rates with inland carriers or engaging in predatory pricing.

With respect to Northern marine resupply services, the reform removed the rate approval requirement. Tariffs must still be filed with the Agency and they also have to be published in the communities served. If considered unjust or unreasonable, the Agency can disallow them or substitute other ones.

Dispute Resolution

The public interest investigation process, defined in the previous legislation, was revised in the *NTA, 1987*. The "prima facie" case requirement was removed while the factors to be covered by the investigation were expanded. If the investigation concerns a rate matter, and the investigation finds the rates to be excessive, provision now exists for the repayment of overcharges to the shipper. The reform instituted two new dispute resolution processes: a mediation process and a final offer arbitration process. The three existing methods of resolving disputes differ in terms of their modal application, the actions required from each party and the statutory time limits for the rendering of a decision.

The Agency's decisions and orders can be changed or rescinded by the Governor-in Council on its own motion or following a complaint. It is also possible to appeal Agency decisions and orders to the Federal Court of Appeal.

Acquisitions of Transport Businesses

Under the reform, the Agency must be notified of the purchase by the acquirer of any business principally engaged in transportation activity under federal responsibility with over \$10 million of assets or annual gross sales. If, following the publication of a notice, objections are received, the Agency has 120 days to decide whether or not the acquisition is in the public interest. The Agency has the power to disallow a proposed acquisition if it is found to be against the public interest.

National Transportation Policy

The National Transportation Policy, as defined in the *NTA, 1987*, retained a number of key objectives from the previous policy statement, namely, to

have an economic, efficient and adequate transport system; to make the best use of all available transport services at the lowest total cost; to protect the users' interests; and to maintain Canada's economic well-being and growth. Two additional and crucial objectives were added -- to meet the highest practical safety standards and to have viable and effective services.

The National Transportation Policy not only favours competition among modes, as was the case before, but also competition within each mode. Competition and market forces were clearly given a key role. Also new in the policy is the requirement to limit economic regulation to those situations where necessary, primarily where market forces are too weak to ensure effective competition. It recognized the importance of transportation to regional economic development, a role tied also to the commercial viability of transportation services. Fares/rates and conditions of transport cannot constitute an undue obstacle to trade and the movement of commodities, especially through Canadian ports, to the development of primary and secondary industries, and to the mobility of persons with disabilities.

Appendix B.1

Sources of Information Used in the Review

- **List of government departments and agencies**

- Statistics Canada
- Transport Canada
- Consumer and Corporate Affairs
- Labour Canada
- Canada Labour Relations Board
- Investment Canada
- Office of the Superintendent of Bankruptcy
- Canada Ports Corporation
- Finance Canada
- Bank of Canada
- Transportation Safety Board of Canada
- Provincial/Territorial Transport Boards

- **Other**

The Agency considered information from:

- Carriers,
- the Conference Board of Canada,
- Canada's major financial institutions,

and three private U.S. sources of information:

- the Official Airline Guides,
- the Airline Tariff Publishing Company,
- the Journal of Commerce's PIERS (Port Import/Export Reporting Service)

Appendix B.2

Agency's 1992 Survey Program

- **Agency's 1992 Shippers' Survey**

Supported by the following Associations:

Association of International Automobile Manufacturers of Canada
Canadian Chemical Producers Association
Canadian Exporters' Association
Canadian Fertilizer Institute
Canadian Horticultural Council
Canadian Importers' Association
Canadian Industrial Transportation League
Canadian Manufacturers' Association
Canadian National Millers' Association
Canadian Produce Marketing Association
Canadian Pulp and Paper Association
Canadian Shippers' Council
Coal Association of Canada
Council of Forest Industries of British Columbia
Grocery Products Manufacturers of Canada
Mining Association of Canada
Motor Vehicle Manufacturers' Association
Propane Gas Association of Canada Inc.
Quebec Food Processors Association
Quebec Lumber Manufacturers' Association
Quebec Mining Association
Retail Council of Canada
Sultran

- **Air Surveys**

- Canadian Professional Sales Association
- North West/Maritime Commercial Travellers' Association
- Northern Air Survey

Representatives of communities, and
Native bands located in northern Canada

- **Marine Surveys**

- **International Freight Forwarders** (supported by the Canadian International Freight Forwarders Associations)
- **Northern Marine** for the Marine Resupply Services, collaboration received from:
 - Arctic cooperatives,
 - Federal, provincial and territorial governments,
 - Indian bands,
 - Northern businesses,
 - Officials from northern communities.
- **Port Terminal Operators** (endorsed by the Canada Ports Corporation and Transport Canada's Public Ports and Harbours Directorate)
- **Shipping Conferences**

- **Motor Carrier Interview Program**

Motor carriers

Officials from provincial, regional and national trucking associations

Provincial licensing boards

Provincial transportation ministries

Appendix B.3

The Agency's 1992 Survey Program

Sample Size and Returns

	Sample Size	Returns Total
Shippers' Survey	3,117	555
Canadian Professional Sales Association (CPSA) Survey	2,665	668
The Northwest Maritime Commercial Travellers' Association Survey	1,208	286
Northern Air Survey	494	71
Shipping Conferences Survey	25	21
Freight Forwarders' Survey	126	44
Northern Marine Survey	176	89
Port Terminal Operators' Survey	227	104
Motor Carrier Interviews	38	38

Regional Distribution of Survey Responses

	Shippers' Survey %	CPSA Survey %	North West/ Maritime CTA Survey %
Newfoundland	3.6	1.2	1.1
Prince Edward Island	1.2	0.2	1.9
Nova Scotia	5.3	3.5	8.7
New Brunswick	6.2	1.9	2.6
Québec	17.4	15.2	3.8
Ontario	26.2	60.2	15.5
Manitoba	8.1	3.0	26.0
Saskatchewan	5.5	1.1	5.3
Alberta	12.6	7.7	13.2
British Columbia	12.1	6.0	21.9
Yukon/Northwest Territories	1.8	-	-

	Northern Air Survey %	Motor Carrier Interviews %
Newfoundland	4.4	2.6
Prince Edward Island	-	5.3
Nova Scotia	-	5.3
New Brunswick	-	10.5
Québec	4.4	13.2
Ontario	4.4	18.4
Manitoba	14.7	10.5
Saskatchewan	1.5	7.9
Alberta	11.8	10.5
British Columbia	5.9	15.8
Yukon Territory	7.3	-
Northwest Territories	45.6	-

Appendix B.4

Sources

Source	Figures	Table
Air Canada and Affiliates	3.2	3.7, 3.8, Appendix C.2
Alberta Transportation and Utilities	5.2	
Bank of Canada	2.3	
Canadian Airlines and Affiliates	3.3	3.7, 3.9, Appendix C.3
Charter Airlines	3.7	Appendix C.4
Journal of Commerce Port Import/Export Reporting Service (PIERS)	6.1, 6.2, 6.3	
Labour Canada		9.1, Appendix E.3, E.4
National Highway Policy Study	5.3	
National Transportation Agency of Canada		
● Agency's records	3.1, 3.22, 6.10, 6.11	3.1, Appendix D.1 to D.5
● Canadian Professional Sales Association and Northwest/ Maritime Commercial Travellers' Association Survey	3.20	
● Liner Trade Data Base	6.1, 6.2	
● Northern Marine Survey	6.16	6.1
● Port Terminal Operators' Survey	6.12	
● Shippers' Survey	4.7, 4.11, 4.12, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 6.6, 6.8, 6.12, 6.13	4.2, 4.3, 4.4, 4.5, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12
● Survey of Canadian Freight Forwarders	6.7, 6.9, 6.12, 6.13	
● Survey of Shipping Conferences	6.13	

Source	Figures	Tables
Office of the Superintendent of Bankruptcy	5.6, 5.7	5.3
Official Airline Guides	3.7, 3.13, 3.14, 3.15, 3.16, 3.17, 3.23	3.6
Provincial and Territorial Licensing (Trucking) Authorities	5.4	5.1, 5.2
Railways		
● Association of American Railroads	4.13, 4.14, 4.17	
● Annual reports filed with Agency	4.8, 4.13, 4.14, 4.15, 4.16	
● Confidential Contract Summaries	4.6	
● Submission to Agency	4.9, 4.10	
● Traffic Information	4.1, 4.2, 4.3, 4.4, 4.5, 7.1, 7.2, 7.3	4.1, 7.1
R.L. Polk Statistics	5.22	5.13
Royal Bank of Canada	2.1, 2.2	
Statistics Canada	3.8, 3.9, 3.10, 3.11, 3.12, 3.18, 3.19, 3.21, 5.1, 5.20, 5.21, 5.23, 5.24	3.3, 3.4, 3.5, 3.10, 9.1, Appendix E.1, E.2, E.5
Transport Canada	3.4, 3.5, 3.6, 6.4, 6.5	3.2
Transportation Safety Board of Canada	8.1, 8.2, 8.3	
U.S. Interstate Commerce Commission	5.5, 5.23	
Water Transport Carriers' annual report and various other sources	6.14, 6.15	

Appendix C.1

Sample Routes

a:	Top 25 routes (Service and Tariff sections)
b:	18 Inter-Regional routes (Service section)
c:	13 Atlantic regional routes (Service section)
d:	17 Ontario/Québec regional routes (Service section)
e:	22 western regional routes (Service section)
f:	57 northern routes (Service section)
g:	18 affiliate carrier routes (Tariff section)
h:	29 mainline, regional and other routes (Tariff section)
i:	25 northern routes (Tariff section)

Montréal-Toronto	a	Ottawa-Fredericton	b
Ottawa-Toronto	a	Ottawa-Moncton	b
Toronto-Vancouver	a	Ottawa-Regina	b,h
Calgary-Vancouver	a	Ottawa-Saint John	b
Calgary-Toronto	a	Québec-Halifax	b
Edmonton-Vancouver	a	Saskatoon-Toronto	b
Toronto-Winnipeg	a	Vancouver-St. John's	b
Halifax-Toronto	a	Charlottetown-Halifax	c
Calgary-Edmonton	a	Deer Lake-Halifax	c
Edmonton-Toronto	a	Deer Lake-St. John's	c,h
Thunder Bay-Toronto	a	Gander-St. John's	c
Montréal-Vancouver	a	Halifax-Moncton	c
Vancouver-Winnipeg	a	Halifax-Saint John	c
Ottawa-Vancouver	a	Halifax-Sydney	c
Vancouver-Victoria	a	Moncton-Saint John	c
Calgary-Winnipeg	a	Saint John-St. John's	c
Halifax-Montréal	a	Stephenville-Gander	c
Prince George-Vancouver	a	Stephenville-Halifax	c
Halifax-Ottawa	a	Stephenville-St. John's	c
St. John's-Toronto	a	Yarmouth-Halifax	c
Ottawa-Winnipeg	a	Dryden-Thunder Bay	d
Halifax-St. John's	a	Hamilton-Montréal	d
Calgary-Montréal	a	Hamilton-Ottawa	d
Regina-Toronto	a,b	Îles/Madeleine-Québec	d
Calgary-Ottawa	a	London-Toronto	d
Brandon-Toronto	b	Montréal-Rouyn/Noranda	d
Deer Lake-Montréal	b	Montréal-Sag/Bagotville	d
Dryden-Winnipeg	b	Montréal-Sept-Îles	d
Edmonton-Montréal	b,h	Montréal-Val d'Or	d,g
Fredericton-Montréal	b	Québec-Sept-Îles	d
Îles/Madeleine-Halifax	b	Sault Ste. Marie-Ottawa	d
Montréal-Charlottetown	b	Sault Ste. Marie-Toronto	d
Moncton-Toronto	b,g	Sudbury-Montréal	d
Montréal-Moncton	b	Sudbury-Toronto	d
Ottawa-Edmonton	b,h	Timmins-Toronto	d

Toronto-Windsor	d	Vancouver-Dawson Creek	f
Québec-Toronto	d,h	Vancouver-Whitehorse	f,i
Brandon-Winnipeg	e	Winnipeg-Gillam	f,i
Calgary-Castlegar	e,h	Winnipeg-Churchill	f,i
Calgary-Grande Prairie	e,g	Inuvik-Aklavik	f
Campbell River-Vancouver	e,h	Inuvik-Ft. Good Hope	f
Cranbrook-Calgary	e,g	Inuvik-Ft. McPherson	f
Cranbrook-Vancouver	e,g	Inuvik-Norman Wells	f,i
Edmonton-Grande Prairie	e,g	Inuvik-Paulatuk	f
Edmonton-Regina	e,h	Inuvik-Sachs Harbour	f
Edmonton-Saskatoon	e,h	Inuvik-Tuktoyaktuk	f
Grande Prairie-Vancouver	e	Inuvik-Yellowknife	f,i
Kamloops-Edmonton	e	Iqaluit-Coral Harbour	f
Kamloops-Vancouver	e,g	Iqaluit-Kuujuuaq	f
Kamloops-Calgary	e,g	Iqaluit-Montréal	f
Kelowna-Vancouver	e,g	Iqaluit-Rankin Inlet	f
Regina-Vancouver	e,h	Iqaluit-Resolute	f,i
Saskatoon-Prince Albert	e	Iqaluit-Yellowknife	f
Saskatoon-Regina	e,h	Kangiqsujaq-Quaqtaq	f
Saskatoon-Winnipeg	e,g	Kuujuuaq-Kangiqsuualujuaq	f
Vancouver-Penticton	e,g	Kuujuuaq-Kangirsuk	f
Vancouver-Port Hardy	e,g	Kuujuuaq-Tasiujaq	f
Vancouver-Williams Lake	e,g	Kuujuuaraapik-Inukjuaq	f
Winnipeg-Edmonton	e,h	Kuujuuaraapik-La Grande	f,i
Blanc Sablon-St. Anthony	f	Kuujuuaraapik-Sanikiluaq	f
Calgary-Inuvik	f,i	Kuujuuaraapik-Umiujaq	f
Cambridge Bay-Iqaluit	f	Norman Wells-Yellowknife	f,i
Cambridge Bay-Yellowknife	f,i	Povungnituk-Akulivik	f
Dawson Creek-Edmonton	f,i	Povungnituk-Inukjuaq	f
Dawson Creek-Prince George	f,h	Povungnituk-Sanikiluaq	f
Deer Lake-Wabush	f,h	Fredericton-Saint John	g
Edmonton-Inuvik	f,i	Charlottetown-Moncton	g
Edmonton-Yellowknife	f,i	Campbell River-Comox	g
Ft. Chipewyan-Edmonton	f	Calgary-Lethbridge	h
Ft. McMurray-Calgary	f,i	Calgary-Lloydminster	h
Ft. McMurray-Edmonton	f,i	Regina-Calgary	h
Ft. St. John-Watson Lake	f,g	Comox-Vancouver	h
Ft. St. John-Ft. Nelson	f,g	Cranbrook-Kelowna	h
Gillam-Churchill	f,i	Fredericton-Toronto	h
Goose Bay-Churchill Falls	f	Montréal-Ottawa	h
Goose Bay-Halifax	f,i	Montréal-St. John's	h
Goose Bay-St. John's	f,i	Nanaimo-Vancouver	h
Kenora-Red Lake	f	Ottawa-Thunder Bay	h
Pickle Lake-Thunder Bay	f	Prince Rupert-Vancouver	h
Rankin Inlet-Winnipeg	f	Saint John-Toronto	h
Saskatoon-La Ronge	f,i	Saskatoon-Vancouver	h
Saskatoon-Stony Rapids	f	Kuujuuaq-Montréal	i
The Pas-Winnipeg	f,i	Iqaluit-Nanisivik	i
Thompson-Flin Flon	f,i	La Grande-Montréal	i
Québec-Wabush	f		
Wabush-St. John's	f,i		
Calgary-Winnipeg	h		
Calgary-Saskatoon	h		

Appendix C.2

Regional Affiliates' Fleet Composition

Air Canada Connectors	Dec. 1991	Dec. 1992	On Order
Air Nova	5 BAe 146-200s 9 Dash 8-100s	5 BAe 146-200s 10 Dash 8-100s	10 Canadair Regional Jets
Air Alliance	15 Dash 8-100s	14 Dash 8-100s	-
Air Ontario	15 Dash 8-100s 6 Dash 8-300s	15 Dash 8-100s 6 Dash 8-300s	-
AirBC	5 BAe 146-200s 6 BAe Jetstream 31s 10 Dash 8-100s 6 Dash 8-300s 6 DHC-6 Twin Otters	5 BAe 146-200s 6 BAe Jetstream 31s 12 Dash 8-100s 6 Dash 8-300s 4 DHC-6 Twin Otters	-
Pacific Coastal Airlines	18 non-jets	15 non-jets	-
NWT Air	2 B737-200Cs 1 Lockheed Hercules	3 B737-200Cs ¹ 1 Lockheed Hercules	-
TOTAL	104	102	10

¹ One aircraft on short-term lease while another undergoes major maintenance.

Appendix C.3

Regional Affiliates' Fleet Composition

Canadi*n Partners	Dec. 1991	Dec. 1992
Air Atlantic	3 BAe 146-200s 13 Dash 8-100s	3 BAe 146-200s 11 Dash 8-100s
Inter-Canadien	12 ATR 42-300s	12 ATR 42-300s
Canadian Partner ^{1,2}	2 ATR 42-300s 14 BAe Jetstream 31s 5 Embraer 120s	9 BAe Jetstream 31s 5 Beech 1900Cs 5 Embraer 120s
Canadian Frontier ³	5 Beech 1900Cs	-
Calm Air	4 BAe HS.748s 2 DHC-6 Twin Otters 2 Others	4 BAe HS.748s 2 DHC-6 Twin Otters 2 Others
Time Air	6 Dash 8-100s 14 Dash 8-300s 7 Fokker F28s 3 Shorts SD3-60s 6 Others	2 Dash 8-100s 14 Dash 8-300s 7 Fokker F28s 3 Shorts SD3-60s 1 Other
TOTAL	98	80

¹ Includes the fleets of Canadian Frontier and Air Toronto.

² Ontario Express began operating as a Canadian Partner on May 15, 1991.

³ Canadian Frontier, a subsidiary of Canadian Partner, ceased operating under its own name on December 31, 1991.

Appendix C.4

Independent Canadian Jet Carriers' Fleet Composition

	Dec. 1991	Dec. 1992
Nationair	4 B747s 5 B757s 3 DC-8s	6 B747s 9 B757s 3 DC-8s
Air Transat	3 B727s 4 L1011s	3 B727s 2 B757s 4 L1011s
Canada 3000	4 B757s	7 B757s
First Air (Also operates turboprops)	4 B727s	4 B727s
Royal Airlines (Division of Conifair)	-	3 B727s
Air Charter Systems ¹ (All cargo)	3 DC-8s	-
TOTAL	30	41

¹ Air Charter Systems ceased offering scheduled cargo services in June, 1992.

Appendix D.1

Notices of Intent to Apply for Abandonment, 1992

(Subsection 160(1) of the *NTA, 1987*)

Province/Railway/ Subdivision	Between Points	Track Miles	Date of Receipt
Alberta			
CN Athabasca	Legal to Athabasca 32.20-93.10	60.90	August 18, 1992
	CN Total Miles	60.90	
Ontario			
CP Port McNicoll	Uhthoff to Medonte 7.3-14.1	6.8	April 16, 1992
CP Waterloo	North Jct. to Waterloo 13.0-15.8, incl. Kent Avenue Spur Ottawa Street Spur	4.2	July 31, 1992
CSXT Subd. No. 1	Arner to Ruthven 27.68-33.79	6.11	September 8, 1992
	CP Total Miles	11.0	
	CSXT Total Miles	6.11	
Québec			
CP Waltham	Wamo Spur in Hull 0.0-1.0	1.0	June 25, 1992
CP Sherbrooke/ Tring/Moosehead	Sherbrooke Subd. 0.0-68.4 Tring Subd. 57.7-59.1 Moosehead Subd. 101.7-117.1	85.2	November 17, 1992
CN Massena	Huntingdon to St. Isidore 38.90-72.50 Valleyfield Subd. 26.1-27.2 Beauharnois Spur (off Massena Subd.) 0.0-5.0	39.70	December 4, 1992
	CP Total Miles	86.2	
	CN Total Miles	39.70	

Province/Railway/ Subdivision	Between Points	Track Miles	Date of Receipt
New Brunswick			
CP Fredericton/ Gibson	Fredericton to Fredericton Jct. 1.0-22.2 Southampton to South Devon 22.0-59.0, incl. Minto Spur 0.9 miles Southampton Spur 9.48 miles	68.58	April 14, 1992
CP St. Andrews Spur	0.0-18.12 Champlain Spur 3.68 miles	21.8	April 14, 1992
CP Mattawankeag/ McAdam/ St. Stephen/ Fredericton	Mattawankeag Subd. 0.0-5.6 McAdam Subd. 0.17-84.4, incl. West St. John Spur from M. 2.2 McAdam Subd. to end of track St. Stephen Subd. 0.0-33.9, incl. Milltown Spur from M. 32.8 St. Stephen Subd. to end of track Fredericton Subd. 0.0-1.0	132.53	November 17, 1992
CP Edmundston	20.4-28.2	7.8	November 17, 1992
CN Havelock	Petitcodiac to Havelock 0.50-12.40	11.90	September 23, 1992
	CP Total Miles	230.71	
	CN Total Miles	11.90	
Nova Scotia			
CP Halifax	Halifax Subd. 52.9-56.1, incl. Kentville Spur 4.6 miles Kingsport Spur 2.3 miles	10.1	November 17, 1992
	CP Total Miles	10.1	

Appendix D.2

Summary of Abandonment Applications, 1992

(Subsection 160(4) of the *NTA*, 1987)

Jurisdiction	No. of Applications			
	CN	CP	CSXT	Total
New Brunswick	1	2	N.A.	3
Québec	N.A.	1	N.A.	1
Ontario	N.A.	2	1	3
Manitoba	N.A.	1	N.A.	1
Alberta	1	0	N.A.	1
N.W.T.	1	N.A.	N.A.	1
TOTAL	3	6	1	10

Jurisdiction	Mileage			
	CN	CP	CSXT	Total
New Brunswick	11.90	90.38	N.A.	102.28
Québec	N.A.	1.0	N.A.	1.0
Ontario	N.A.	11.0	6.11	17.11
Manitoba	N.A.	11.92	N.A.	11.92
Alberta	60.90	N.A.	N.A.	60.90
N.W.T.	57.10	N.A.	N.A.	57.10
TOTAL	129.90	114.30	6.11	250.31

Appendix D.3

Active Rail Line Abandonment Applications and Lines Under Reconsideration during 1992

(Subsections 160(4) and 171(1) of the *NTA, 1987*)

Province/Railway/ Subdivision	Between Points	Track Miles	Status
New Brunswick			
CP Edmundston/ ^{1,9} Shogomoc	Aroostook-Grand Falls	20.4	Abandoned November 24, 1992.
	0.0-20.4		
	Aroostook 104.6-105.8	1.2	
CP Fredericton/ Gibson ¹	Fredericton-Fredericton Jct.	68.58	Application received July 31, 1992.
	1.0-22.2		
	Southampton-South Devon		
	22.0-59.0, incl. Minto Spur 0.9 miles Southampton Spur 9.48 miles		
CN Havelock ¹	Petitcodiac-Havelock 0.50-12.40	11.90	Application received December 29, 1992.
CP St. Andrews Spur ¹	0.0-18.12, incl. Champlain Spur 3.68 miles	21.8	Application received July 31, 1992.
CP Shogomoc ¹	McAdam-Woodstock 0.0-51.5	51.5	Abandoned November 24, 1992.
CP Shogomoc ^{1,4,7,9,10}	Woodstock-Newburg 51.5-54.2	2.7	Abandoned December 22, 1992.
CP Shogomoc/ ^{1,3,4,5,9} Gibson	Newburg-Upper Kent	34.3	Abandoned November 24, 1992.
	54.2-88.5		
	Newburg-Southampton Junction 0.0-22.0	22.0	
CP Shogomoc ^{1,4,7,9,10}	Upper Kent-Aroostook 88.5-104.6	16.1	Abandoned December 22, 1992.
CP Tobique ^{1,4,9,10}	Perth Junction-Plaster Rock 0.0-27.5	27.5	Abandoned December 22, 1992.
CN Total Miles		11.90	
CP Total Miles		266.08	

Province/Railway/ Subdivision	Between Points	Track Miles	Status
Québec			
CP Beebe ¹	Beebe Junction-Border 32.9-34.99	2.09	Abandoned January 10, 1992.
CN Granby ²	Clough-Marieville 15.57-38.70	23.13	Notice of Reconsideration issued July 13, 1992.
CN Montmagny ^{1,6}	Harlaka-St-Romuald 111.35-119.12	7.77	Abandonment deferred until April 3, 1993.
CP St-Gabriel ¹	Joliette-St-Félix-de-Valois 7.1-17.8	10.7	Abandoned November 30, 1992.
CN Sorel ²	Tracy-Sorel 45.50-47.16	1.66	Ordered continued.
	Nicolet-St-Grégoire 77.00-83.82	7.03	Abandoned August 14, 1992.
	83.99-84.20		
CP Waltham ¹	Wamo Spur 0.0-1.0	1.0	Abandoned January 22, 1993.
	CN Total Miles	40.59	
	CP Total Miles	13.79	
Ontario			
CSXT No. 1 ¹	Arner-Ruthven 27.68-33.79	6.11	Application received December 21, 1992.
	Rodney-West Lorne 100.9-102.8	1.9	Ordered continued.
CN Midland ^{1,4}	Uhthoff-Midland 52.00-75.21, incl. Midland Industrial Spur 75.21-76.13 Coldwater Spur 0.0-0.71	24.84	Ordered continued.
CN Newton ^{2,7,11}	Stratford-Palmerston 1.17-36.62, incl. Kincardine Subd. 0.00-1.41	35.45	Notice of Reconsideration issued April 3, 1992.
		1.41	
CN Owen Sound ^{2,7,11}	Palmerston-Owen Sound 0.00-71.43	71.43	Notice of Reconsideration issued April 3, 1992.

Province/Railway/ Subdivision	Between Points	Track Miles	Status
CP Port McNicoll ¹	Uhthoff-Medonte 7.3-14.1	6.8	Abandoned December 3, 1992.
CN Renfrew ^{2,8}	Nepean-Arnprior 0.00-27.20	27.20	Abandoned July 31, 1992.
CN Smiths Falls ²	Richmond-Smiths Falls 13.00-34.05	21.05	Abandoned February 5, 1992.
CN Uxbridge ²	Mile 38.88-Stouffville 38.88-40.31	1.43	Notice of Reconsideration issued November 27, 1992.
CP Waterloo ¹	North Jct.-Waterloo, incl. Kent Avenue Spur Ottawa Street Spur	4.2	Application received November 2, 1992.
	CN Total Miles	182.81	
	CP Total Miles	11.00	
	CSXT Total Miles	8.01	
Manitoba			
CP Carman ¹	Elm Creek-Carman 0.9-10.35 12.53-15.0	11.92	Abandoned August 30, 1992.
CN Oak Point ¹	Steep Rock-Gypsumville 131.00-156.7	25.70	Abandoned June 26, 1992.
CN Ste. Rose ²	Ochre River-Ste. Rose du Lac 0.00-11.7	11.7	Abandoned November 28, 1992.
	CN Total Miles	37.40	
	CP Total Miles	11.92	
Alberta			
CN Athabasca ¹	Legal-Athabasca 32.2-93.1	60.9	Application received November 17, 1992.

Province/Railway/ Subdivision	Between Points	Track Miles	Status
CN Sheerness ¹	Batter Jct.-Sheerness 0.00-13.0	13.0	Abandoned February 10, 1992.
	CN Total Miles	73.9	
Saskatchewan			
CP Shamrock ¹	Tyson-McMahon 70.3-95.2	24.9	Abandoned January 16, 1992.
CN Weyburn ²	Talmage-Weyburn 0.0-13.3	13.3	Abandoned May 21, 1992.
CN Carlton ²	Dalmeny-Laird 0.0-28.2	28.2	Abandoned May 21, 1992.
	CP Total Miles	24.9	
	CN Total Miles	41.5	
N.W.T.			
CN Pine Point ¹	Pine Jct.-Pine Point Mines 0.0-54.3	54.3	Abandoned May 3, 1992.
	CN Total Miles	54.3	

Footnotes

- ¹ First consideration of application
- ² Reconsideration of application
- ³ Subject of public hearing
- ⁴ Appealed to Federal Court of Appeal
- ⁵ Petition to Governor in Council
- ⁶ Letter-decision dated October 4, 1991 varied Order 1991-R-170 to exclude miles 119.12-120.30; Order 1992-R-131 dated April 22, 1992 varied Order to extend abandonment date to October 31, 1992. Order 1992-R-364 dated October 14, 1992 varied Order to extend abandonment date to April 3, 1993.
- ⁷ Included in one application
- ⁸ Order No. 1991-R-588 issued December 24, 1991 varied Order No.1988-R-1216 by changing effective date of abandonment to either July 31, 1992, or thirty (30) days after such earlier date as shall be advised jointly by BASF Fibres Inc. and CN, that there is agreement among BASF, the Regional-Municipality of Ottawa-Carleton and CN on the purchase of the branch line after the abandonment of the operation.
- ⁹ Federal Court appeal dismissed on November 24, 1992.
- ¹⁰ Agency lifted stay on abandonment orders as a result of Federal Court judgement (see 9).
- ¹¹ On October 9, 1992, the Victoria County Railway Co. filed an offer pursuant to section 174 of *NTA, 1987*, to purchase from CN the Newton Subdivision between Stratford (M.1.17) and Palmerston (M.36.62) and the Owen Sound Subdivision between Palmerston (M.O.O.) and Harriston (M.9.43) in Ontario.

Endnotes

- A** This table provides details of the applications and rail line segments dealt with in 1992 or for which a decision can be expected to be rendered during 1993. Excluded are cases where no application was received, as well as any conveyance applications and cancelled applications.
- B** Under section 171 of the *NTA, 1987*, a line ordered continued must be reconsidered by the Agency within three years.

Appendix D.4

Summary of Orders and Decisions, 1992 Branch Line Abandonment Under the *NTA, 1987*

Province/Railway/ Subdivision	Between Points	Track Miles	Order No./Date	Decision
New Brunswick				
CP Edmundston/ Shogomoc	Aroostook-Grand Falls 0.0-20.4 104.6-105.8	21.6	1991-R-10 91/01/09	Ordered abandoned February 8, 1991. Abandoned November 24, 1992.
CP Shogomoc	McAdam- Woodstock 0.0-51.5	51.5	1991-R-11 91/01/09	Ordered abandoned February 8, 1991. Abandoned November 24, 1992.
CP Shogomoc/ Gibson	Newburg-Upper Kent 54.2-88.5 Newburg- Southampton Jct. 0.0-22.0	56.3	1991-R-288 91/06/03	Mile 75.96 to Mile 88.5 ordered abandoned July 3, 1991. Mile 54.2 to Mile 75.96 & Mile 0.00 to Mile 22.0 ordered abandoned December 31, 1991. Abandoned November 24, 1992.
CP Shogomoc	Woodstock- Newburg 51.5-54.2 Upper Kent- Aroostook 88.5-104.6	2.7 16.1	1989-R-90 89/05/12	Ordered abandoned July 12, 1989. Abandoned December 22, 1992.

Province/Railway/ Subdivision	Between Points	Track Miles	Order No./Date	Decision
CP Tobique	Perth Junction- Plaster Rock 0.0-27.5	27.5	1989-R-91 89/05/12	Ordered abandoned July 12, 1989. Abandoned December 22, 1992.
Québec				
CP Beebe	Beebe Junction- Border 32.9-34.99	2.09	1991-R-570 91/12/11	Abandoned January 10, 1992.
CN Montmagny ¹	Harlaka- St-Romuald 111.35-119.12	7.77	1991-R-170 91/04/03 1992-R-364 92/04/03	Ordered abandoned April 3, 1992. Abandonment date extended to April 3, 1993.
CP St-Gabriel	Joliette-St-Félix- de-Valois 7.1-17.8	10.7	1991-R-33 91/01/25 1992-R-16 92/01/24	Ordered abandoned December 25, 1991. Abandoned November 30, 1992.
CN Sorel	Tracy-Sorel 45.50-47.16	1.66	1992-R-251 92/07/15	Ordered continued.
	Nicolet-St- Grégoire 77.0-83.82 83.99-84.20	7.03	1992-R-251 92/07/15	Abandoned August 14, 1992.
CP Waltham	Wamo Spur, Hull 0.0-1.0	1.0	1992-R-446 92/12/23	Ordered abandoned January 22, 1993.
Ontario				
CSXT No. 1	Rodney-West Lorne 100.9-102.8	1.9	1992-R-136 92/04/24	Ordered continued.
CN Midland	Uhthoff-Midland 52.00-75.21, incl. Midland Industrial Spur 75.21-76.13 Coldwater Spur 0.00-0.71	24.84	1992-R-255 92/07/20	Ordered continued.

Province/Railway/ Subdivision	Between Points	Track Miles	Order No./Date	Decision
CP Port McNicoll	Uhthoff-Medonte 7.3-14.1	6.8	1992-R-390 92/11/03	Abandoned December 3, 1992.
CN Renfrew ²	Nepean-Arnprior 0.00-27.20	27.20	1991-R-588 91/12/24	Abandoned July 31, 1992.
CN Smiths Falls	Richmond-Smiths Falls 13.00-34.05	21.05	1991-R-59 91/02/05	Abandoned February 5, 1992.
Manitoba				
CN Carman	Elm Creek- Carman 0.9-10.35 12.53-15.0	11.92	1992-R-270 92/07/31	Abandoned August 30, 1992.
CN Oak Point	Steep Rock Jct.- Gypsumville 131.0-156.7	25.7	1992-R-171 92/05/27	Abandoned June 26, 1992.
CN Ste. Rose	Ochre River-Ste. Rose du Lac 0.00-11.7	11.7	1992-R-379 92/10/29	Abandoned November 28, 1992.
Saskatchewan				
CN Carlton	Dalmeny-Laird 0.0-28.2	28.2	1992-R-129 92/04/21	Abandoned May 21, 1992.
CP Shamrock	Tyson-McMahon 70.3-95.2	24.9	1991-R-586 91/12/17	Abandoned January 16, 1992.
CN Weyburn	Talmage-Weyburn 0.0-13.3	13.3	1992-R-130 92/04/21	Abandoned May 21, 1992.
Alberta				
CN Sheerness	Batter Jct.- Sheerness 0.00-13.0	13.0	1992-R-3 92/01/10	Abandoned February 10, 1992.

Province/Railway/ Subdivision	Between Points	Track Miles	Order No./Date	Decision
N.W.T.				
CN Pine Point	Pine Jct.-Pine Point Mines 0.0-54.3	54.3	1992-R-113 92/04/03	Abandoned May 3, 1992.

Footnotes:

- ¹ Letter-decision dated October 4, 1991 varied Order 1991-R-170 to exclude miles 119.12-120.30
- ² Order No. 1991-R-588 issued December 24, 1991 varied Order No.1988-R-1216 by changing effective date of abandonment to either July 31, 1992, or thirty (30) days after such earlier date as the Agency shall be advised jointly by BASF Fibres Inc. and CN, that there is agreement among BASF, the Regional-Municipality of Ottawa-Carleton and CN on the purchase of the branch line after the abandonment of the operation.

Appendix D.5

Summary of Plans for Abandonment Notices and Applications, 1993

To determine the abandonment plans of the various railways under its jurisdiction, the Agency solicited submissions from the following companies:

- Algoma Central Railway
- Burlington Northern Railroad Company
- Canadian National Railway Company
- Canadian Pacific Limited
- Consolidated Rail Corporation
- CSX Transportation Incorporated
- Devco Railway
- The Essex Terminal Railway Company
- Napierville Junction Railway Company
- Nipissing Central Railway
- Norfolk and Western Railway Company
- Québec North Shore and Labrador Railway Company
- Wabush Lake Railway Company and Arnaud Railway Company
- The White Pass and Yukon Corporation Limited

Of the companies canvassed, CN and CP Rail submitted abandonment plans. None of the other companies indicated that they had any branch line abandonment plans for 1993.

Whereas the following summary indicates the order of magnitude of notices and applications and approximate mileages to be submitted, the actual lines proposed to be abandoned are still subject to change contingent upon such factors as business decisions, government decisions and negotiations with customers.

Summary of Planned 1993 Branch Line Abandonment Activities

	CN	CP	TOTAL
Notices of Intent	13	30	43
Abandonment Applications*	14	30	44
Total Mileage	612	785	1,397

* Includes cases where applications will be submitted during 1993 following Notices of Intent filed in 1992.

Appendix E.1

Employment

Year	Transport Sector (000's)					All Other Sectors
	Air	Rail	Truck	Water	All	
1992	58.6	62.5	118.1	23.1	421.1	9,531.2
1991	61.7	63.9	120.2	26.2	431.1	9,800.8
1990	68.2	68.6	133.1	27.9	466.3	10,329.6
1989	65.9	73.0	138.9	29.5	457.3	10,244.4
1988	61.2	76.3	130.9	29.1	439.8	9,889.3
1987	57.3	79.1	128.0	28.4	433.5	9,574.6
1986	55.1	88.3	125.0	28.4	437.0	9,189.5
1985	51.7	91.1	128.5	28.9	437.8	8,925.0
1984	49.5	95.5	128.1	30.7	440.1	8,595.9
1983	50.3	96.2	119.4	33.6	437.7	8,376.4

Appendix E.2

Average Weekly Earnings (Current dollars)

Year	Transport Sector (000's)					All Sectors
	Air	Rail	Truck	Water	All	
1992	775	844	569	775	656	549
1991	745	821	550	750	642	532
1990	702	770	547	725	610	508
1989	653	726	544	733	598	486
1988	629	695	531	699	579	462
1987	593	631	500	658	548	443
1986	583	628	481	614	533	427
1985	578	588	484	620	520	414
1984	569	575	476	598	507	400
1983	545	538	460	554	485	384

Appendix E.3

Strikes and Lockouts

Number of Cases

Year	Air	Rail	Truck	Water
1992	2	1	5	3
1991	2	-	5	5
1990	1	3	6	6
1989	3	4	12	4
1988	4	1	5	5
1987	4	1	3	5
1986	6	1	4	6
1985	10	-	6	1
1984	3	-	5	-
1983	4	2	12	3

Workers Involved

Year	Air	Rail	Truck	Water
1992	543	258	651	1,305
1991	320	-	3,399	353
1990	24	1,880	572	415
1989	187	444	2,811	2,527
1988	1,016	3,000	214	5,734
1987	8,930	48,660	92	1,441
1986	3,860	102	73	5,026
1985	12,633	-	79	78
1984	125	-	366	-
1983	478	1,565	465	146

Appendix E.4

Regional Distribution of Transportation Employment in 1992

Region	Number of Workers	Percentage
Newfoundland	5,900	1.4
Prince Edward Island	1,900	0.5
Nova Scotia	11,400	2.7
New Brunswick	11,700	2.8
Québec	100,500	24.0
Ontario	140,900	33.7
Manitoba	22,800	5.5
Saskatchewan	11,900	2.8
Alberta	47,800	11.4
British Columbia	62,500	14.9
Yukon	800	0.2
Northwest Territories	500	0.1
TOTAL	418,600	100.0

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National Transportation Agency
of Canada

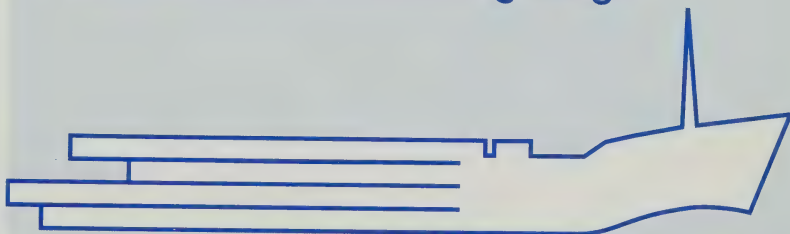
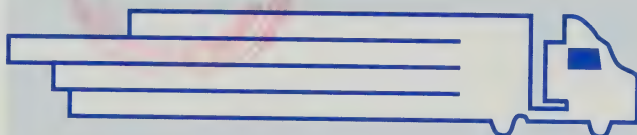
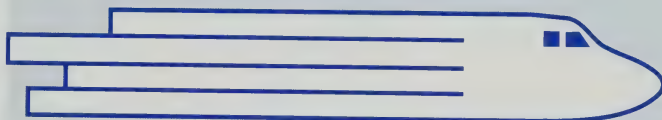


Office national des transports
du Canada

1993

Canada

Annual Review



Transportation Trends
and Developments:
An Economic Perspective

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of the
National
Transportation
Agency of Canada
1993**

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TABLE OF CONTENTS

SUMMARY AND CONCLUSIONS	i
INTRODUCTION	1
REGULATORY ENVIRONMENT	7
ECONOMY	27
INDUSTRY STRUCTURE	
• Highlights of 1993	41
• Introduction	42
• Air	42
• Rail	50
• Extra-Provincial Trucking	58
• Marine	68
• Freight Forwarders	82
• Intermodal Alliances	83
TRANSPORT SERVICES	
• Highlights of 1993	85
• Introduction	86
• Air	86
• Rail	103
• Extra-Provincial Trucking	111
• Marine	116
• Port Terminal Operators	123
• Total Quality Management	127
TRANSPORTATION DEMAND	
• Highlights of 1993	129
• Introduction	130
• Demand for Passenger Transport Services - Air	130
• Demand for Freight Transport Services - Air	132
• Demand for Freight Transport Services - Rail	134
• Demand for Freight Transport Services - Trucking	141
• Demand for Freight Transport Services - Marine	143
• Northern Marine Traffic	150
• Port Traffic	151
• Railway Intermodal	154
• Canadian Cargo Routed Through U.S. Ports	155
• Canada's Trade and Transportation Services	156

TRANSPORT PRICES

• Highlights of 1993	163
• Introduction	164
• Air Services	164
• Rail Services	169
• Trucking Services	172
• Marine Services	177

EMPLOYMENT 185

FINANCIAL PERFORMANCE

• Highlights of 1993	201
• Introduction	204
• Air	205
• Rail	207
• Motor Vehicle Carriers	210
• Marine	211

COMPETITION

• Highlights of 1993	215
• Introduction	216
• Air	217
• Rail	225
• Trucking	229
• Marine	238
• Conclusions	245

SAFETY 247

ISSUES 257

APPENDICES 263

SUMMARY AND CONCLUSIONS

Trends that began at the beginning of the recession continued in 1993. There was little overall growth for shippers or carriers as the economy continued its somewhat anemic recovery. The three "R's" of economic recovery — retrenchment, rationalization and restructuring — pre-dominated the transport sector.

Although Statistics Canada declared an official end to the recession in 1992 — technically defined as three consecutive quarters of growth — most members of the transportation community did not participate in this recovery. Growth in the economy was uneven. Airline traffic declined as business travel remained curtailed and leisure travellers were ever-more cost conscious, requiring the incentive of bargain fares before travelling. Airline revenues and yields improved, but bottom-line performance remained weak. Airlines continued their own programs of seeking partners, mergers, alliances, and reductions or consolidation of flights and operations.

Railways continued their rationalization efforts, abandoning track, merging and consolidating operations and reducing personnel. Intermodal traffic continued to grow, but other sectors showed uneven progress. Markets for sulphur and potash were down in 1993, while lumber and related building products responded to increased U.S. demand and a devalued Canadian dollar. Growth in the North American automotive sector stimulated traffic in both finished vehicles and parts. Some Canadian operations of the big three automobile manufacturers benefitted further by producing models that were in especially high demand in the United States. Steel production also revived during the year.

Effects of the recovering economy did not extend to marine carriers on the Great Lakes. Similarly, trucking firms were still struggling with intense competition and adapting to the changing, but growing, flow of traffic from East-West to North-South transborder flows.

Six years after deregulation and three years after the onset of a severe recession, shippers and carriers coped mostly by running leaner businesses. Whether by rationalizing operations, such as abandoning railway lines, or by reducing capacity through the disposition of aircraft, the industry ended 1993 with mixed economic results. While there were continuing losses for the major airlines and CN, nonetheless, they all showed improvements

and CP Rail managed to show bottom-line gains. The year's results signalled the beginning of a turn-around over 1992.

This intense level of competition in the transportation sector benefited shippers who enjoyed the most stable level of rates seen in many years. The majority of shippers surveyed by the Agency reported either no increases in their freight rates over the previous year, or changes that were in line with the inflation rate, running at less than two per cent. Some shippers reported that their rates actually decreased, albeit by a small amount. Relatively few shippers reported large increases in rates. Shippers also reported that they often had competitive choices among carriers and modes. They also said that they were generally successful in negotiating proper rate conditions with their carriers.

By the end of the year, there were signs the economy was picking up. Growth in the GDP had improved to just under three per cent and growth in the U.S. economy was increasing at twice that rate. Canadian exports to the United States remained one of the bright spots in the economy and for carriers serving U.S. markets. If these trends continue into 1994, the transport sector may finally begin to realize the benefits of the years of retrenchment, by serving a stronger economy with a leaner and more productive industry.

INTRODUCTION

The Annual Review began with the passage of the *National Transportation Act, 1987 (NTA, 1987)*. The Act specifies that, for four years, the Agency shall conduct annual reviews of the industries affected by the Act, including carriers and shippers, and assess the impacts of regulatory reforms introduced in the Act on the competitive environment in all regions of the country. That mandatory requirement ended with the comprehensive review of the *NTA, 1987* by the National Transportation Act Review Commission, which issued its report in March, 1993. The Review Commission, however, recommended continuing of the Annual Reviews with the emphasis on the views and interests of stakeholders.

"... The emphasis of (the Annual Reviews) should shift from preparation for scrutiny of the *NTA, 1987* by this Commission to the broader issue of transport regulatory process efficiency in a changing commercial environment.

... with revisions to their scope reflecting current stakeholder concerns."

*National Transportation Act
Review Commission, 1993*

The Annual Review has evolved since its first report. It has always contained information drawn from its survey program and this remains one of the few sources anywhere for direct assessment of users' experiences with the carriers and the provisions of the *Act*. It also reports on the financial and operational performance of the major sectors of the transportation industry: air, rail, truck and marine. It covers areas such as safety and employment. In addition, it contains a summary of current major issues. The report also reviews the year's major regulatory activities and cases involving the Agency. As a result, the Annual Review has grown into a reference document covering most aspects of federally regulated transportation. It can serve as a guide to policy and decision-makers in both government and industry and to students of transportation.

The most significant events since the late 1970s are listed in the accompanying chronological table. The chronology provides a quick reference to the Canadian and U.S. developments that shaped the history of transportation deregulation during the previous two decades.

This year, the Review is structured differently. It does not adhere to the strict modal format followed in previous editions. Instead, reflecting the growing integration of intermodal transport services, it discusses the industry from the perspective of demand, pricing, service, structure, performance and competition. This approach reflects the growing integration of intermodal services. An overview of the economy provides background and context. A section on issues identifies existing and future problems.

The Agency is grateful for the cooperation and assistance of all who contributed their time and energy to providing the information used in the Review: shippers and their associations who continue to respond to the Shippers' Survey and provide the Agency with unique information; railways, airlines, trucking companies, shipping conferences, northern marine operators and other carriers who provide detailed information; commercial travellers and their associations, port terminal operators, freight forwarders and their associations; and territorial, provincial and other federal government agencies for their contribution of data and other information.

CHRONOLOGY OF TRANSPORTATION DEREGULATION, 1978-1992

Year	Mode	Event	Description
1978	Air	<u>U.S. Airline Deregulation Act</u>	Restrictions removed on entry, routes and pricing for U.S. domestic airline services.
		Canada permits domestic Advance Booking Charters (ABCs).	Sets the stage for increased competition for scheduled carriers in domestic long-haul markets.
1979	Air	All capacity restrictions on CP Air's domestic services removed.	CP Air expands its domestic operations and introduces new low-priced fares to gain market share.
	Marine	<u>Shipping Conferences Exemption Act</u> revised.	<u>SCEA, 1979</u> extends conferences' exemption from competition legislation; Canadian Shippers' Council named as designated shipper representative.
1980	Air	Restrictions eased on domestic ABCs; Wardair commences domestic charter operations.	Competition intensifies in the domestic market.
	Rail	<u>U.S. Staggers Rail Act</u>	Deregulation of U.S. railways allows them to use confidential contracts, route closures and surcharges to capture transborder traffic.
	Trucking	<u>U.S. Motor Carrier Act</u>	Deregulation of U.S. trucking industry indirectly opens up new markets to Canadian trucking companies.
1983	Rail	<u>Western Grain Transportation Act</u>	New statutory rates established for rail movement of grain.
	Marine	Rate wars flare in North Atlantic.	Shipping lines on Canada-U.K./Europe trade routes engage in fierce price competition.
1984	Air	New Canadian Air Policy	"De facto" deregulation: licence restrictions removed on domestic airline services; airlines allowed greater route and pricing flexibility.
		CP Air buys Eastern Provincial Airways.	Acquisition marks the initial stage in the building of two national airline networks.
	Marine	<u>U.S. Shipping Act of 1984</u>	Open shipping conferences serving U.S. remain exempt from anti-trust legislation, but independent action by member lines to be allowed and service contracts to be published; intermodal rates are legalized.
1985	All modes	Minister of Transport issues "Freedom to Move - a framework for transportation reform".	Government position paper outlines proposals for economic regulatory reform of all federally-regulated transportation.
	Air	Air Canada and PWA Corp. each buy 24.5 per cent of Air Ontario.	The major airlines continue developing affiliate operations with regional carriers.
	Marine	Formation of Transpacific Westbound Rate Agreement (TWRA) and Asia North America Rate Agreement (ANERA).	These super-conferences incorporate twelve former conferences, five into TWRA, seven into ANERA.

CHRONOLOGY OF TRANSPORTATION DEREGULATION, 1978-1992

Year	Mode	Event	Description
1985	Trucking	Memorandum of Understanding	Federal and provincial governments agree to adopt "reverse onus" entry and to study the complete elimination of regulatory controls; provinces agree to eliminate controls on extra-provincial tariffs.
1986	All modes	<u>Competition Act</u> passed.	Competition Tribunal established to prevent firms from abusing dominant position in a way that substantially lessens competition.
	Air	Air Canada buys into Air Nova, Air Ontario, and Air BC; CP Air buys into Air Atlantic, Nordair, Norcanair; PWA Corp. pays \$300 million for CP Air.	The consolidation of the air industry gains momentum with the assembly of national and regional carriers into two large families.
		Wardair enters scheduled domestic service with modern jet fleet.	Wardair is the first independent airline to challenge the emerging duopoly with competitive, low-priced service on mainline routes.
	Rail	Central Western Railway acquires CN's Stettler subdivision	Central Western becomes the first short-line railway in Canada conveyed from Class I railways.
	Marine	Overcapacity afflicts liner trades.	OECD estimates that expansion of world container fleet, particularly in Pacific and Atlantic, has created 25-35 per cent overcapacity.
1987	Air	PWA Corp buys into Time Air, Calm Air, Inter-Canadien, and establishes Ontario Express; Air Canada acquires control of AirBC and Air Ontario.	The two families establish major-affiliate structures operating national hub-and-spoke networks.
		Air Canada operations crippled by ground workers' strike.	Air Canada loses important traffic and revenues to competitors during peak Christmas travel season.
	Marine	<u>Shipping Conferences Exemption Act</u> revised (<u>SCEA, 1987</u>).	Open/closed conferences exempt from <u>Competition Act</u> , but must allow for independent action by members and confidential service contracts; intermodal rates are prohibited.
1988	All modes	<u>National Transportation Act, 1987</u> , and <u>Motor Vehicle Transportation Act, 1987</u> come into force; <u>Transport Act</u> repealed.	Deregulation of rail mode through competitive access, confidential contracts, and streamlined abandonment; market entry/exit procedures and tariffs deregulated in air and trucking modes; regulation of northern marine operations limited to larger carriers operating community resupply services.
	Air	Air Canada buys into NWT Air and Air Alliance; fare wars erupt.	Air Canada's affiliate network is virtually complete; competition heats up with Wardair's cut-rate pricing and Air Canada's determination to recover from its recent strike.
		First block of Air Canada shares sold to the public.	Privatization of Air Canada commences.
		Airlines order almost \$9 billion of new aircraft.	Ambitious fleet renewal programs eventually lead to overcapacity in the industry and financial burdens for Air Canada and Canadi*n.
	Rail	Railways haul record volumes of traffic.	Increased traffic reflects strong demand for non-grain bulk exports, especially coal shipments to Japan and Korea.
		CN sells Grand Trunk Eastern in U.S., closes its Moncton shops, and announces withdrawal from rail operations in Newfoundland and P.E.I.	CN accelerates its downsizing program by scaling back operations, abandoning lines and selling assets.
	Marine	Maersk and K-Line introduce double-stack train services from U.S. west coast to Toronto and Montréal.	First large-scale attempt to satisfy transportation needs with multi-modal integrated services.
1989	All modes	<u>Canada-U.S. Free Trade Agreement</u>	North-south traffic flows expected to expand greatly; more competition anticipated with U.S. carriers.
	Air	PWA Corp. purchases Wardair for \$250 million.	The amalgamation of Wardair and Canadi*n produces an operating loss for previously profitable PWA Corp.

CHRONOLOGY OF TRANSPORTATION DEREGULATION, 1978-1992

Year	Mode	Event	Description
1989	Air	Inter-Canadien bolts from the Canadi*n family and resurfaces as independent Intair; two charter carriers, Holidayair and Minerve Canada file for bankruptcy.	Inter-Canadien positions itself to compete with Air Canada and Canadi*n in Ontario and Quebec; fierce competition claims two casualties in charter market, but eight competitors remain.
	Rail	Railway traffic drops; net incomes of both railways decline; CN and CP abandon 1,300 miles of low-density track.	Wheat traffic slumps by 40 per cent as a result of the 1988 drought; abandonments represent four per cent of CN's network, 3.5 per cent of CP's (the only year in which either railway reached the four per cent abandonment limit).
	Marine	Higher-capacity container vessels introduced by Evergreen, Maersk, Cast, COSCO, Hoegh, CGM, NOL and others. Transpacific Stabilization Agreement (TSA) filed.	New vessels exacerbate international liner trade's chronic overcapacity. TSA marks the introduction of discussion and bridging agreements in Canadian liner trades, limiting capacity offered to stabilize rates in transpacific trades.
1990	Air	Air Canada and Canadi*n incur financial losses of \$89 million.	Recession-reduced traffic and spiralling fuel costs affect Air Canada's and Canadi*n's financial performance, and force them to restructure their operations.
		Five charter carriers, Points of Call, Crownair, Vacationair, Worldways and Odyssey, cease operations.	Failed charter operators are quickly replaced by expansion of other competitors such as Nationair, Canada 3000 and Air Transat.
		Makivik Corp. buys First Air.	Combination of First Air and Makivik-controlled Air Inuit offers competition to Air Canada and Canadi*n affiliates in the North.
	Rail	CP purchases outstanding shares of Soo Line in U.S.; both railways acquire new equipment, construct intermodal terminals, and raise clearances for double-stack container services.	CP's acquisition secures its north-south links; Canadian railways invest heavily in intermodal operations.
		CN sells holdings in hotels and telecommunications.	Elimination of non-core business assets allows CN to reduce debt.
1991		Supreme Court rules in favour of Central Western on successor rights.	CWR is relieved of any obligation to adhere to prior CN labour agreements in its operation of the former CN Stetler subdivision.
	Marine	Woodlands Marine ceases operations.	Woodlands was the last package freight carrier on the Great Lakes.
	Air	Air Canada and Canadi*n continue to sell assets, cut costs, and lay off employees but report combined losses near \$380 million; affiliates also incur losses.	Traffic plummets on both international and domestic routes due to combined effects of Gulf War, recession and new Goods and Services Tax.
		City Express and Intair cease operations.	Non-aligned scheduled independent carriers prove to be no match for the two carrier families in competitive markets.
		Canada-U.S. Open Skies talks begin.	Negotiators address a variety of issues in an effort to improve and expand Canada-U.S. air services.
	Rail	CP purchases D&H railway in U.S. and integrates its Canadian and U.S. operations to form CP Rail System; CN consolidates its Canadian and U.S. operations into CN North America.	Canadian railways integrate their operations on both sides of the border; D&H purchase provides CP access to New York and Philadelphia as railways continue to adapt their networks to a continental orientation.

CHRONOLOGY OF TRANSPORTATION DEREGULATION, 1978-1992

Year	Mode	Event	Description
1991	Rail	Central Western buys CP's Coronation and Lacombe subdivisions; CN sells lines to Ontario Northland Transportation Commission and Goderich-Exeter Railway Company.	Short-line and regional railways aid CN and CP in rationalizing their networks.
		CP closes its Angus Shops in Montréal.	Operational cutbacks involve large write-downs, contributing to financial loss for Canadian Pacific Limited in 1991.
1992	All modes	Royal Commission on National Passenger Transportation	The Commission's comprehensive report calls for phased withdrawal of transportation subsidies, application of "user-pay" concept, and restriction of government role to that of setting policy.
	Air	Air Canada and PWA Corp. incur losses totalling almost \$1 billion; Air Canada rejects merger with Canadi*n; Air Canada buys into Continental Airlines, allies itself with United Airlines; Canadi*n proposes alliance with American Airlines.	Overcapacity, sagging traffic, and heavy fare discounting combine with growing interest costs and one-time restructuring charges to produce the largest financial losses in airlines' history. Both major Canadian airlines seek alliances with U.S. mega-carriers as a strategy for survival.
		Nationair enters scheduled domestic service.	An independent carrier challenges the majors in their most important markets with a modern fleet and low-priced fares.
	Rail	CP completes \$15 million tunnel expansion project in Rockies, tests new Montréal-Chicago double-stack service. CN joins first Canada-U.S.-Mexico intermodal service, and announces plans for Sarnia Tunnel.	Railways continue with heavy investment in infrastructure and development of north-south links to compete for growing intermodal traffic.
		CN announces cutback of 10,000 jobs and reports losses of \$1 billion; CP applies to abandon all lines east of Sherbrooke; CN and CP agree to share Ottawa Valley rail line.	Canadian railways implement large-scale cutbacks and absorb huge charges for workforce adjustment in their efforts to achieve competitive cost levels; Ottawa Valley agreement raises potential for joint utilization of rail infrastructure.
		Annual four per cent limit on branch line abandonment expires after 1992.	<u>NTA, 1987</u> abandonment criteria and National Transportation Agency procedures remain in effect.
	Marine	Trans Atlantic Agreement (TAA) approved by U.S. Federal Maritime Commission.	Similar to the TSA in 1989, the TAA incorporates both conference and non-conference lines, and manages prices and capacity offered on U.S.-North Atlantic trade routes.
		<u>Coasting Trade Act</u>	Domestic marine trade, including activities related to commercial and resource exploration activities, is reserved for Canadian ships.
	Trucking	Canadian Co-op of Independent Truck Owner-Operators formed.	CCITOO's objective is to reduce members' operating costs through volume buying.
		Reverse onus entry test expires after 1992.	Council of Ministers responsible for Transportation and Highway Safety agrees to replacement of reverse onus entry test with national fitness test.

REGULATORY ENVIRONMENT

Highlights of 1993

The Agency dealt with several complex cases and issues, involving foreign investment in a Canadian airline, rail rationalization, intermodal competition, acquisition of a carrier, proposed marine pilotage tariff increases and the *WGTA* Costing Review.

Proposed regulations on reduced air fares for attendants of travellers with disabilities were circulated for comments by the Agency. The Agency also issued regulations on services to be provided by air carriers to travellers with disabilities.

The "reverse onus" entry test used for extra-provincial trucking activities became solely a "fitness" test. Transport Canada published proposed regulations on hours of service for commercial vehicle drivers.

Through amendments to its legislation, Ontario joined the four Western provinces in allowing the use of 16.2 metre (53 foot) trailers on highways. Similar amendments are underway in remaining provinces.

The government released draft reforms to the *Western Grain Transportation Act* (*WGTA*) and established a Producer Payment Panel to develop subsidy payment options.

Regulatory Reforms of 1987-1988

The regulatory reforms of 1987-1988 placed more emphasis on competition and market forces.

Deregulation of the U.S. transportation industry commencing in the late 1970s and the importance of Canada's trade relationship with the U.S. spurred the overhaul of Canada's transportation legislation. This led to the implementation of the *National Transportation Act, 1987 (NTA, 1987)*, the *Motor Vehicle Transport Act, 1987 (MVTA)* and the *Shipping Conferences Exemption Act, 1987, (SCEA)*. The new legislation aimed to promote greater reliance on competition and market forces in the transportation industry by streamlining and significantly reducing economic regulation.

Air Services

Prior economic regulation of air transportation services called for comprehensive controls over entry, exit, levels of service, routes, operating equipment, passenger fares and cargo rates. The application of these controls was eased substantially by the New Canadian Air Policy of 1984. The new policy called for elimination of defined roles for air carriers, relaxed entry to markets, elimination of frequency and aircraft-type restrictions on licences, and freedom to discount ticket prices.

Air transportation services were deregulated in southern Canada; some regulation was retained in the North.

Such unofficial deregulation, carried out within the basic legislative and regulatory framework, became official in the *NTA, 1987*. The legislation removed most economic regulation for domestic air services in southern Canada. In the North, economic regulation was reduced. International air services were untouched.

The old market entry criteria of public convenience and necessity was replaced for southern Canada by a "fit, willing and able" standard. The new standard requires an operating certificate, adequate liability insurance coverage and proof of Canadian citizenship of ownership. No restrictions can be imposed on southern licences. For northern Canada, the onus is on objectors to prove why a licence application should not be granted, and licences may be restricted as to the type of service to be provided, the size of aircraft used, and the points served.

For domestic air services, market exit is allowed after a 120-day advance public notice.

The filing requirement for domestic tariffs was removed. Regulatory intervention powers over basic fares still exist on all northern routes but apply only to monopoly routes in the southern zone. Carriers and shippers/travellers are now allowed to enter into confidential contracts for domestic air transportation.

Rail Services

The *NTA, 1987* modified a number of provisions of the *Railway Act* and introduced some new ones.

For rail, the major reforms involved confidential contracts, competitive access, dispute resolution and network rationalization.

Railways and shippers are allowed to enter into confidential contracts specifying rates and transportation conditions. Collective rate-setting by railways was abolished.

New provisions were introduced to assure shippers of competitive access to more than one railway. Rail interswitching limits were extended from 6.4 kilometres to 30 kilometres. Shippers located beyond the 30-kilometre interswitching limit may obtain a competitive line rate to move their traffic to the nearest interchange for transfer to a competing railway.

Rail line abandonment procedures were streamlined. New alternatives were introduced, such as transferring of lines to independent operators and funding of improvements to alternative transportation services. Time limits were introduced on the Agency's processing of applications.

The new legislation provides for voluntary mediation and final-offer arbitration to resolve railway-shipper disputes as well as a more responsive public interest appeal mechanism for issues related to domestic cargo shipments by rail, air and northern marine resupply services.

Trucking Services

The *MVTA* defined a new framework for the regulation of extra-provincial truck undertakings, i.e. trucking firms operating beyond the limits of one province or territory (between provinces or across the Canada-U.S. border). The new framework was based on a 1985 Memorandum of Understanding between the federal and provincial governments.

In trucking, the focus of regulatory reform continued to be on entry requirements and safety.

The main regulatory reforms applying to extra-provincial trucking activities were easier market entry, promotion of a nationally uniform market-entry provision administered by the provinces, and introduction of more effective safety regulations in a National Safety Code. In the new legislation, the former "public convenience and necessity" entry criterion was replaced by a "reverse onus" public interest entry test, which places the burden of proof on an objector. Rate controls, although not strictly enforced in the past, were eliminated. On January 1, 1993, the "reverse onus" entry test expired. Since then, "fitness" has become the sole standard for licensing extra-provincial trucking. Any restrictions related to the type or the area of service have been removed from licences.

In 1993, Transport Canada proposed amendments to the 1989 regulations on commercial vehicle drivers' hours of service. The proposed regulations were published and submitted to public scrutiny. The primary objective of these administrative changes to the regulations is to reduce driver-at-fault highway accidents due to driver fatigue. If

implemented, the proposed regulations would increase flexibility of the trucking and bus industry to schedule their driving assignments.

The use of 16.2 metre trailers gained increasing acceptance in 1993.

The use of 16.2 metre (53 foot) trailers is quickly becoming the industry standard in North American trucking. In Canada, the four western provinces have allowed the use of such trailers for a number of years. Other provinces such as Ontario, Quebec, Prince Edward Island and Newfoundland have allowed their use on a permit basis. In 1993, Ontario passed legislation allowing the use of 16.2 metre trailers. In the five other provinces, amendments to legislation and/or regulations were underway. Recent and proposed amendments to provincial legislation or regulations to allow 16.2 metre trailers also contain a number of conditions regarding rear impact and visibility requirements. On the latter, the use of reflective tape along the sides and rear of the trailer is required. This raises another uniformity issue for trucking firms operating in both Canada and the U.S., as visibility requirements differ on each side of the border.

In 1993, Canada participated, in the context of the North American Free Trade Agreement, in the tripartite work aimed at achieving compatibility in technical and safety standards in trucking by January 1, 1997.

Marine Services

Regulatory changes affected shipping conferences serving Canada, marine resupply operations in the North, and common carriers on the Great Lakes.

The primary objective of the revised *SCEA* continues to be shielding certain conference practices from the *Competition Act*. Conferences are still required to file their agreements with the Agency, as well as information on rates and conditions of service. These requirements do not apply to independent shipping lines.

Shipping conferences remained shielded from competition legislation, but were required to allow for independent action and confidential contracts.

SCEA clarifies and narrows the exemptions enjoyed by conferences, provides a more equitable balance between Canadian shippers and shipping cartels, and increases the scope for price competition among conference members. The legislation allows conferences to set terms for the use of service contracts, but provides a mandatory right to conference members to take independent action on rates and conditions of service. Loyalty contracts requiring a commitment of 100 per cent of a shipper's cargo are abolished. *SCEA* prohibits conferences from collectively negotiating freight rates with inland carriers or engaging in predatory pricing.

The Act also strengthens mechanisms for investigating and mediating complaints involving conferences where a reduction in competition has led to an unreasonable decline in service or an increase in transportation costs.

For carriers engaged in **northern marine resupply** operations, the licensing process was simplified. Licences are now issued on an indefinite rather than an annual basis, and apply to total carrier capacity as opposed to individual pieces of equipment.

Licensing applies only to those marine carriers providing community resupply services. Bulk fuel movements in the western Arctic are included in the definition of community resupply cargo but national defence cargo and cargoes involved with resource exploration and development are deregulated.

Carriers are required to file their tariffs with the Agency and publish them in the communities served.

Repeal of the *Transport Act* in 1987 eliminated the licensing requirements for common carriers providing **package freight service** on the Canadian Great Lakes and upper St. Lawrence River.

Other Related Developments

While this report focusses on economic regulation, the regulatory and institutional environment related to transportation has also been affected by many other changes since 1988. For example, the privatization of major airports at Vancouver, Calgary, Edmonton and Montréal; government initiatives to recover portions of infrastructure costs through user fees; the emphasis on safety regulations, and new provisions for transportation of dangerous goods and environmental protection.

Reports of Recent Government Inquiries

Royal Commission on National Passenger Transportation - November, 1992

The Royal Commission called for withdrawal of transportation subsidies, implementation of a "user-pay" concept, and a restricted role for government.

On November 19, 1992, the Royal Commission on National Passenger Transportation issued its final report on Canada's intercity passenger transportation needs over the next 30 years. The report called for phased withdrawal of government transportation subsidies, application of a "user-pay" concept, and restriction of the government's role to that of setting policy. For existing services, the report stated that every cost, including environmental damage, insurance fees and safety features, should be reflected in passenger ticket prices. The Commission made over 70 specific recommendations on all modes of travel, under the following basic principles:

- Government support and maintenance of passenger transportation should be diminished so that passengers are responsible for paying for services they use.
- Decision-making authority in passenger transportation should be assigned to the level of government that is closest to the people and able to efficiently exercise such authority.

- All modes of travel should be treated equally.
- Non-travelling Canadians should not pay the bill for those who travel.
- The environment should be protected.
- Carriers should face market pressure to respond to consumer preferences and reduce costs.
- Passenger transportation infrastructure and services should match travellers' needs more closely — no "gold-plating".
- Travellers should pay for what they use, no more, no less.
- People with disabilities should have wider access to the passenger transportation system.
- The passenger transportation system should be more transparent in its accounts and governments should be more accountable for their decisions.

National Transportation Act Review Commission (NTARC) - March, 1993

The Commission's statutory review of the five-year-old package of legislative reforms was based on extensive consultations and over 150 submissions from shippers, carriers, governments, labour groups, port authorities and other interested parties. Its report contained a comprehensive list of 56 recommendations affecting all modes of transport.

The NTA Review Commission made recommendations to maintain competition and consumer choice in airline services ...

With respect to **airline services**, the Commission sought to maintain competition and consumer choice by allowing higher levels of foreign investment in Canadian airlines. If a monopoly should develop, foreign carriers should be allowed to serve the domestic market, or to establish Canadian operations.

A number of other recommendations would clear the way for more effective integration of Canadian air services with U.S. and other international networks:

- liberalization of Canada-U.S. bilateral arrangements;
- preparation for development of multilateral trade agreements in air services;
- publication of criteria applied in designating international air routes;
- relaxation of restrictions on air charter services;
- expedited Agency procedures concerning joint service arrangements such as block space agreements and code-sharing; and
- development of a future procedure for airport landing-slot allocation.

The Commission also suggested that the existing regulation of northern air services be retained and reviewed again within five years.

... privatize CN and improve railways' ability to control costs ...

As for the **rail** industry, the Commission proposed that CN be privatized and that, the ability of railway companies to adjust and control their costs be improved through:

- liberalization of the process for rail rationalization;
- rationalization of the Prairie branch line network;
- facilitation of the creation of short-line railways;
- promotion of CN/CP joint track usage; and
- investigation of the feasibility of separating operations from ownership and maintenance of the rail plant.

On more specific items, the Commission's report included recommendations to modify the provisions on competitive line rates and final-offer arbitration, and to abolish sections dealing with compensatory rates and requirements for filing confidential contracts.

*... press for the
implementation of the
National Safety Code in
trucking ...*

In the **trucking** industry, the Commission set a deadline of March 31, 1994, for agreement on uniform operating standards and full implementation of the National Safety Code. Failing this, the government should introduce appropriate legislation to be administered by the provinces or withdraw the delegation to administer extra-provincial trucking regulation and/or withhold federal contributions to highway infrastructure.

The Commission recommended use of a uniform fitness test by all jurisdictions. The test would screen out unsafe and uninsured operators. Also, the government should offer flexible infrastructure investment opportunities to encourage private sector funding.

*... and retain SCEA pending
revisions to the U.S. Shipping
Act of 1984.*

In the **marine** sector, NTARC recommended that Canada maintain *SCEA* until such time as the U.S. *Shipping Act of 1984* might be amended with respect to anti-trust immunity for shipping conferences. It further proposed that conferences be allowed to negotiate the inland portion of through rates with land-based carriers and that the notice period for independent action by member lines be reduced from 15 to 10 days.

As in the case of northern air services, the Commission recommended that regulations applying to northern marine resupply operations be retained but reviewed again within five years. However, it also recommended amending the legislation to permit the Agency to regulate the terms and conditions of contracts between northern shippers and carriers.

Report of the Standing Committee on Transport (SCOT) - June, 1993

SCOT received numerous submissions and conducted public hearings across Canada as part of its review of the NTARC report. The review addressed about a third of the NTARC recommendations.

SCOT's first findings echoed NTARC concerns about accident rates in the airline and trucking industries and supported NTARC recommendations for investigation and corrective action.

The Standing Committee agreed with some NTARC recommendations, rejected others, and proposed a larger role for SCOT in future reviews of transportation issues and legislation.

The SCOT report acknowledged the competitive necessity of rationalizing rail infrastructure, but suggested the process could be disciplined by halting any abandonments of secondary or mainline track until a basic national rail network has been established. It also recommended that VIA Rail be given a legislative mandate to operate passenger rail services in Canada, and that existing passenger rail services considered in the abandonment procedure. Another proposal would "bank" surplus rights-of-way for future rail or non-rail use. The report took NTARC's recommendations on conveyance of rail lines a step further. It proposed a new policy to facilitate the creation of short-line railroads and, on a larger scale, regional rail networks. This would include the harmonization of federal-provincial regulatory regimes in this area.

SCOT rejected NTARC recommendations to explore the concept of a common user rail plant, to amend the provisions on competitive line rates and final offer arbitration, and to abolish the sections on compensatory rates.

For the **airline** industry, SCOT agreed with NTARC's primary objective of maintaining competition. However, if overcapacity and irresponsible competition threatened the viability of the national airlines, SCOT favoured a limited form of "managed" competition. It rejected the NTARC recommendation to raise foreign ownership limits for Canadian air carriers to 49 per cent. For licensing northern carriers, SCOT proposed that the Agency issue written reasons for decisions on all applications.

The SCOT report concurred fully with NTARC recommendations on the **trucking** industry.

For the **marine** industry, SCOT was against the automatic repeal of *SCEA* in concert with any U.S. removal of anti-trust immunity for conferences. Instead, it proposed that the legislation be reviewed by SCOT at that time. Also, further to NTARC observations on problems with the administration, structure and competitiveness of the Canadian ports system, it was recommended that SCOT undertake a comprehensive review in this area. SCOT rejected NTARC's recommendation to exclude any reference in the purpose clause (Section 3) of the *NTA, 1987* to the importance of Canada's ports to export trade.

On more general issues, SCOT agreed with the NTARC position on development of a taxation policy that would not compromise the competitiveness and viability of Canadian carriers. However, SCOT rejected NTARC proposals to repeal provisions dealing with acquisitions of Canadian transportation undertakings, to exclude environmental matters from the *Act*, and to remove reference to regional economic development from the Section 3 purpose clause.

Finally, it was recommended that another comprehensive review of the legislative reforms be undertaken by SCOT in five years.

Transportation Regulatory Initiatives Since 1988

Agency regulations have undergone a comprehensive review following the government's general directive in 1992.

Since 1988, Canadian transportation legislation has not changed substantially; yet a number of regulatory initiatives were introduced. These are highlighted below. Some recent initiatives have yet to come into force, but are listed to give a more complete picture of the social and economic regulatory environment affecting the Canadian transport industry. For instance, in addition to the normal requirement to update regulations to keep pace with developments in the transportation industry, the Agency has responded to the government's general directive of 1992 to ensure that the use of regulatory powers contributes to the prosperity of the nation.

Accessibility Regulations

An amendment to the *NTA*, 1987 in July, 1988, empowered the Agency to make regulations on accessibility standards for all modes of transport under federal jurisdiction. In 1992, a further amendment included meeting the needs of travellers with disabilities as an integral part of the National Transportation Policy.

In September, 1993, the Agency published, for comment, draft regulations on reduced air fares for attendants of travellers with disabilities. At the same time, the Agency issued regulations on services to be provided by air carriers to travellers with disabilities. The latter regulations came into effect in January, 1994. Regulations on training requirements for employees of rail, air and marine carriers under federal jurisdiction (including staff at terminals) who deal with travellers with disabilities were implemented in January 1994.

Regulations under development involve enhanced accessibility to transportation equipment used by carriers; terms and conditions of carriage by rail, ferry and small aircraft; communication of information, and terminal accessibility.

Air Transportation Regulations

One of the more significant action taken by the Agency was the 1991 order providing for electronic filing of international tariffs. In 1992, a regulatory amendment strengthened the protection of charter flight advance payments in the event of non-performance by the carrier for international and northern Canada charters. Also, advance filing time for Inclusive Tour Charters (ITC) and Advanced Booking Charters (ABC)/ITC charter programs was reduced from 45 to 15 days.

The Agency has drafted new provisions relating to Canada-U.S. charters permitting charter carriers to operate on a more equal footing with scheduled carriers. The general review of the *Air Transportation*

Regulations has identified a number of issues in the areas of international charters, resaleable charters, tariffs, free and reduced-rate transportation, and service schedules.

With respect to domestic operations, the Agency is currently soliciting views on proposed amendments to liability insurance provisions as well as on other possible changes to the general provisions and domestic licensing regulations.

Marine Regulations

A significant regulatory change in the marine sector was the implementation of the *Coasting Trade Act* as of December 1, 1993. The *Act* deals with applications to utilize foreign vessels, through a temporary licence, in the coasting trade of Canada, as well as applications dealing with other marine-related activity such as dredging and storage.

This new legislation replaced Part X (previously Part XV) of the *Canada Shipping Act* and the *Coasting Trade Exemption Regulations* which fell under this part. Under the *Act*, Coasting trade licences are issued by the Minister of National Revenue. The Minister's decisions based upon the Agency's determinations.

Atlantic Region Freight Assistance Program

As part of the federal government's fiscal restraint initiative, a 10 per cent reduction was to be implemented in the Atlantic Region Freight Assistance program for the Year 1993-94. While a portion of the reduction was implemented through Ministerial directive, the *Maritime Freight Rates Act* was amended by Bill C-113 to eliminate rail movements of "Used Household Goods" and "Scrap and Waste Material" and to change the 30 per cent reduction factor for the basic westbound rail program to 28.5 per cent. The 30 per cent reduction factor in the basic westbound truck program was changed to 28.5 per cent and the intra regional subsidy was changed from ten per cent to nine per cent by Ministerial directive effective April 1, 1993. An amendment to the *Atlantic Region Freight Assistance Regulations* to eliminate these commodities from the basic westbound truck program appeared in the *Canada Gazette*, Part 1, in February, 1994.

Rail Regulations

An early initiative was to establish a price structure for interswitching in the *Railway Interswitching Regulations* in 1988. These regulations were reviewed again in 1992 with no recommendations for change. In 1989 new regulations were implemented on notification of lower rates for movement of western grain. In 1991, regulations were issued on railway traffic liability.

Since 1988, there have been numerous minor amendments to the *Railway Lines Abandonment Regulations* and to the provisions related to railway infrastructure. Other amendments are in process to reflect current costing practices and document filing requirements in the *Railway Costing Regulations* and the *Railway Companies Payments Regulations*.

Since 1988, the first year that confidential contracts between shippers and railways were allowed, it has been possible to file these confidential rail contracts electronically.

Western Grain Transportation Act

The Agency has played a supportive role in the overhaul of the Western Grain Transportation Act.

On June 4, 1993, draft legislation to reform the *Western Grain Transportation Act (WGTA)* was released by the federal government.

The main objectives of the draft legislation were to:

- improve the efficiency of Canada's grain handling and transportation system;
- redirect the federal government's annual assistance (the Government Commitment) from the railways to producers over a four-year phase-in period;
- remove economic distortions caused by the current method of payment and annual *WGTA* rate scale biases; and,
- enable the industry to become more self-reliant and market-oriented.

At the same time that the draft legislation was released, the government directed the Administrator of the Grain Transportation Agency to consult further with the industry on the efficiency proposals in the draft legislation. The Administrator reported his findings to the Ministers of Transport and Agriculture on January 25, 1994. These findings have not yet been released to the public.

Additionally, the government established a Producer Payment Panel to develop options on implementing the proposed method of payment change and to report to the Ministers of Transport and Agriculture. The Panel's technical report was released in late March, 1994. Its final report is expected to be presented to the Minister in early May, 1994.

The draft legislation proposes a number of changes to the *WGTA*, the *NTA*, 1987, the *Canadian Wheat Board Act* and to the *Farm Income Protection Act*. These changes would affect the magnitude of the currently-protected grain-dependent branch line network in western Canada, rail freight rates and western grain pooling points. Specific proposals include:

- Establish an expedient rail line rationalization process is proposed to eliminate low density, high cost grain-dependent branch lines. This would be accomplished by removing prohibition orders and providing temporary funding for alternate service arrangements from branch

line subsidy savings following abandonment. All abandonment applications would continue to be filed and approved by the National Transportation Agency.

- Achieve port neutrality by removing certain biases inherent in the current *WGTA* rate scale methodology. At present, certain routes and ports are favoured over others. Removing these biases would encourage shippers to select ports and, thereby, routes, on the basis of economic and market forces.
- Continue regulating the current *WGTA* freight rate structure reflecting four-year cost reviews and annual distance-related rate-setting by the National Transportation Agency.
- Remove restrictions on the offering of incentive rates by railway carriers. This would permit the benefits of handling traffic more efficiently to be passed onto shippers more quickly.
- Phase-out federal government payments to railways over four years. Instead producers would receive payments under a program to be established under the *Farm Income Protection Act*. As a result, grain shippers would assume an increasing share of the freight rate until the fourth year when shippers would be paying the full cost of freight transportation. All subsidies to short-line railways would be discontinued after the four-year phase-in. These carriers will be expected to negotiate commercial arrangements with other rail carriers to which they connect.
- Discontinue the current Canadian Wheat Board pooling points of Thunder Bay and Vancouver and establish future pooling points by Order-in-Council.

Major Agency Decisions in 1993

The evolving competitive scene was reflected in cases handled by the Agency in 1993.

Transport companies in all modes experienced another year of intense competitive pressure in the difficult economic climate of 1993. Most have been forced to continue rationalizing, cutting costs and trimming operations. Some firms have tried to improve their competitive position through mergers or alliances. Cases brought before the Agency during the past year reflected this evolving scene. The cases selected for this review were chosen because they are worth pointing out as they were all unique in terms of their complexity and implications for the future of Canada's transportation system.

Mergers and Acquisitions Cases

Canadi*n Airlines\AMR Corporation

Under a proposed agreement announced in December, 1992, a subsidiary of AMR Corporation (AMR) would pay \$246 million to acquire a 33 per cent equity holding in Canadi*n, including a 25 per cent voting interest and two of the eight seats on Canadi*n's board of directors. AMR would provide a range of administrative services to Canadi*n. Canadi*n's seat inventory would be transferred from the Gemini computer reservation system to AMR's Sabre system. The case raised

concerns over the proposed extent of AMR's control over Canadi*n. However, after conducting public hearings, the Agency found that the proposed acquisition was not against the public interest.

Canada Post Corporation/Purolator Courier

Canada Post announced a proposal to pay \$55 million for a 75 per cent interest in PCL Holdings Ltd., the parent company of Purolator Courier Ltd. Purolator controlled about 30 per cent of the small parcel business in Canada.

After conducting a public hearing, the Agency ruled that the acquisition was not against the public interest.

Rail Rationalization Cases

CN Sydney-Truro

The Cape Breton and Central Nova Scotia Railway (CB&CNS), a subsidiary of RailTex Inc., proposed to purchase a 387 kilometre length of CN line between Truro and Sydney serving the industrial area of Cape Breton. The Agency held public hearings and issued its decision in July, 1993, ruling that the conveyance was not contrary to the public interest. The Agency was also satisfied that the CB&CNS was legally authorized to operate as a railway company in the province of Nova Scotia.

CN/CP Ottawa Valley Agreement

In November, 1993, the Agency approved a "co-production" agreement between CN and CP Rail. The agreement involves the joint ownership and operation of approximately 597 kilometres of track between Ottawa and North Bay, and the abandonment of about 290 kilometres of redundant CP Rail track west of Ottawa, between Smiths Falls and Mattawa. The Agency reviewed the agreement and evidence on file as well as that presented at a public hearing in October.

CP Sherbrooke-Saint John

CP Rail applied to abandon the operation of almost all of its lines east of Sherbrooke, including the Sherbrooke, Tring and Moosehead subdivisions in Quebec, and the Mattawamkeag, McAdam, St. Stephen and Fredericton subdivisions in New Brunswick. The total distance is about 355 kilometres.

After conducting public hearings, the Agency approved the abandonments except for a small section of track in the upper Saint John River Valley. The Governor in Council subsequently postponed the effective date of the abandonments to January, 1995. Leave to appeal the Agency's decision was denied by the Federal Court.

Intermodal Competition Cases

Voyageur vs VIA Rail

The Voyageur bus company alleged that VIA Rail's advance purchase discount fares were unfair. Voyageur which operates in the Montréal-Ottawa-Toronto triangle further alleged that VIA's pricing policy had severely harmed the bus company.

The Agency ruled that there was no link between VIA's discount fares and Voyageur's loss of passengers and no conclusive evidence that Voyageur had been harmed by this specific VIA's pricing policy.

Upper Lakes Shipping vs CN

Upper Lakes Shipping (ULS), a marine carrier operating on the Great Lakes, together with other interested parties, including unions and port authorities, alleged that CN had captured fine crushed salt traffic traditionally carried by ULS vessels from Windsor, Ontario to Bécancour, Quebec, by offering a non-compensatory rate.

The Agency confirmed that the rate was non-compensatory, but did not disallow it, since the Agency concluded that it did not substantially lessen competition or significantly harm ULS.

Thunder Bay Harbour Commission vs CN/CP

The Commission, together with other parties interested in the transfer of grain to ships at Thunder Bay, alleged that CN and CP Rail were using WGTA subsidies for the movement of grain to Thunder Bay to offset rail transportation costs east of Thunder Bay. As a result, the rates charged for the eastern portion of grain movements were below cost and the applicants lost business.

The Agency found that all rates it had investigated from western Canada to eastern Canada were compensatory. However, some rates from Thunder Bay to eastern Canada were determined to be non-compensatory and were either cancelled or revised by the Railways. The case was subsequently petitioned to the Governor in Council by the Pilotage Authority.

Marine Pilotage Tariff Increases

**Atlantic Pilotage Authority
Great Lakes Pilotage Authority
Laurentian Pilotage Authority**

The Agency dealt with several pilotage tariff applications in 1993, considering whether or not they were prejudicial to the public interest. It ruled that, for the non-compulsory pilotage areas, increases proposed

by the Atlantic Pilotage Authority be implemented, and that the Great Lakes Pilotage Authority could implement part of their proposed increases. Increases proposed by the Laurentian Pilotage Authority were not allowed, and this latter decision was petitioned to the Governor in Council by the Pilotage Authority.

Accessibility Case

Buchholz vs Air Canada

The complaint filed against Air Canada involved fares charged to a traveller with a disability who required three seats during flight as well as the assistance of two attendants on take-off and landing. Air Canada had charged three full fares plus one 50 per cent discount fare for the first attendant and one full fare for the second attendant.

The Agency decided that the traveller's disability should not place her at a financial disadvantage and that the extra charges imposed by the carrier constituted an undue obstacle to her mobility. It was determined that one full fare for the disabled traveller and 25 per cent of that fare for each of the two attendants would be fair and reasonable compensation for the services provided.

Specialized Agency Studies Carried Out in 1993

Quadrennial Review of Rail Grain Traffic Costs

Studies focusing on grain transportation costs were undertaken in 1993.

Every four years, the Agency is required to determine the actual costs of moving rail grain traffic regulated under the *WGTA*. In 1993, the Agency conducted a costing review of CN and CP 1992 rail operations related to western grain movements. The Costing Review was done in consultation with grain industry participants and was completed on schedule by the end of March, 1994.

In its Costing Review, the Agency:

- (1) Determined the volume-related variable costs for the rail movement of western grain, as well as the line-related variable costs for grain dependent branch lines (costs related to the operation of such lines). Together, these costs are known as the "base year costs".
- (2) Made recommendations to the Minister of Transport on the appropriateness of factors used in determining the CN Adjustment - an amount paid directly to CN by the federal government to compensate CN for certain imposed public duties which create cost burdens or losses in revenue resulting from its western grain operations.
- (3) Made recommendations to the Minister of Transport on the appropriateness of the level of contribution of grain rail movements to constant costs of the railway companies. The level of contribution,

currently set at 20 per cent of volume-related variable costs, is assessed every four years in conjunction with each costing review. The assessment is guided by the objectives that overall railway revenues must be adequate and that grain's contribution must be fair in relation to the contribution made by other commodities.

The results of the 1992 Costing Review are ultimately reflected in the development of the four subsequent rate scales for 1994/95 through to 1997/98.

Other Rail Costing Studies Related to Grain

In response to Ministerial requests, the Agency undertook studies on WGTA base rates, and on eastbound/westbound cost differentials.

Concurrent with the consultations on *Western Grain Transportation Act* legislation reform, the Minister of Transport called upon the Agency to conduct two studies. The objective of the first study was to determine the appropriateness of the base rates. These rates ultimately determine the nature of the annual crop year rates. The second study was to determine the difference in the cost per tonne for moving grain to eastern ports versus to Vancouver or Prince Rupert (i.e. the East/West cost differential).

In both studies, the Agency based its analysis on actual detailed railway traffic and costing data. Before coming to a decision and making recommendations to the Minister, the Agency developed preliminary conclusions, and conducted extensive consultations with grain industry participants.

The Agency recommended a new rate scale, characterized by a linear relationship with volume/distance. The new rate scale would lower the rates for movements for either a relatively short or long length of haul. In contrast, rates for movements just above the average length of haul of 1,650-1,700 kilometres would become slightly higher since the new schedule eliminates the "kink" characteristic in the present rate scale.

In the matter of an East/West cost differential, the Agency found that for an average 1,600-kilometres movement, 1992 eastbound costs per tonne exceeded westbound costs by an average of one dollar. The cost differential varied by distance ranging between 50 cents per tonne for short haul movement to two dollars per tonne for long haul grain movement.

In January, 1994, the results of these two Agency studies were forwarded for consideration by the Minister of Transport. The Minister subsequently requested the Agency to release the report on the two studies for information purposes, in advance of further potential WGTA reform.

Study of Federal and Provincial Rail Legislation

Inconsistencies exist between federal and provincial rail legislation.

Canadian Class I railways have indicated that the majority of their traffic moves on a very small portion of their rail networks. The density of traffic on portions of their networks is not sufficient to make the operations profitable on some lines. Consequently, railways have been rationalizing their networks. In recent years, conveyance of lines has been considered more and more as an approach to rationalization. Lines which have been conveyed and acquired by short-line operators are intra-provincial lines. These lines come under provincial legislation. The Agency undertook a review comparing only the federal and provincial railway legislation. Results at this stage are extremely preliminary in nature, and are subject to revision. The federal and provincial legislation were examined to see what aspects of rail matters were covered in each of the province's acts as compared to the federal acts. Table 2.1 summarizes this comparison of rail legislation.

With the exception of New Brunswick, all provinces have provisions in their legislation dealing with the entry and exit of short-line rail operations. Only Saskatchewan's rail legislation did not have a provision dealing with connecting rail traffic between two different rail lines. Safety, common carrier obligations and infrastructure are aspects of rail operations addressed by provisions in all provincial rail legislation. British Columbia and Ontario are two provinces with provincial labour legislation which recognizes the succession rights of federal rail collective agreements to provincial rail undertakings. It should be noted that other legislation that could effect the operation of rail operations in a province, including environmental legislation, were not covered in this comparison of federal and provincial legislation.

TABLE 2.1
A Preliminary Comparison Between Federal and Provincial Rail Legislation

DESCRIPTION	BC	ALTA	SASK	MAN	ONT	QUE	NB	NS
ENTRY								
Conveyance	●	●	●	○	●	○	○	●
Merger	●	●	○	○	●	●	○	○
Incorporate								
- Companies' Acts	●	○	○	●	○	●	○	●
- By Statute	○	●	○	○	●	●	●	○
Certificate of Fitness	●	○	○	●	○	●	○	●
Certificate to Operate	●	○	●	●	●	○	○	●
EXPROPRIATION	●	●	●	●	●	●	●	○
EXIT								
Conveyance	●	●	●	○	●	○	○	●
Merger	●	●	○	○	●	●	○	○
Abandonment	●	○	●	●	○	●	○	●
Notification Requirements Before Exiting	●	○	●	●	○	●	○	●
ACCESS TO RAIL NETWORK								
Running Rights	●	●	○	○	●	○	○	●
Competitive Line Rates	○	○	○	○	○	○	○	○
Interswitching	●	○	○	○	○	○	●	○
Joint Trackage	○	●	○	○	●	○	○	●
Connection	●	●	○	●	●	●	●	●
Interchange Traffic	●	●	○	●	●	●	●	●
SAFETY								
Railway Operations	●	●	●	●	●	●	●	●
Dangerous Goods	●	●	○	○	●	●	●	●
SUBSIDIES								
Legislated Freight Subsidy Program (Commodity e.g. WGTA; Modal, Regional - MFRA/AARFA)	○	○	○	○	●	○	○	○
LEGISLATED COMMON CARRIER OBLIGATION	●	●	●	●	●	●	●	●
DISPUTE RESOLUTION MECHANISMS								
Mediation	○	○	○	○	○	●	○	○
Arbitration	●	○	○	●	○	●	●	●
Hearings/Inquiries Process	●	○	○	●	●	●	○	●

"●": a matter covered by federal legislation also addressed in provincial legislation.

"○": a matter NOT covered in provincial legislation.

TABLE 2.1 (cont'd)
A Preliminary Comparison Between Federal and Provincial Rail Legislation

DESCRIPTION	BC	ALTA	SASK	MAN	ONT	QUE	NB	NS
TARIFF								
Filing (Electronic or Hard Copy)	●	●	●	●	●	○	○	●
Approval	●	●	○	○	●	○	●	○
Confidential Contracts	○	○	●	●	○	●	○	●
Publication Requirement	●	●	●	●	●	●	●	●
Notice of Variation	●	○	○	○	●	○	●	●
Joint Rates	●	●	●	●	●	●	○	○
INFRASTRUCTURE								
Approval of Construction or Modification	●	●	●	●	●	●	●	●
Cost Apportionment	●	●	●	●	●	●	○	●
Intersection (Road, Pipeline, Cable, etc.)	●	●	●	●	●	●	●	○
COMMON CARRIER LIABILITY								
Goods, Infrastructure, Operation	●	●	●	●	●	○	○	●
Possibility to Contract out of It	○	○	●	○	○			●
RAIL PASSENGER SERVICES								
Entry	○	●	●	●	●	○	●	●
Exit	○	●	●	●	○	○	○	●
Tariff Filing Requirements	●	●	●	●	●	○	●	●
Accessibility for Travellers with Disabilities	○	○	○	○	○	○	○	○
Dispute Resolution Mechanisms	○	○	○	●	●	○	○	●
LABOUR								
Succession Rights	●	○	○	○	●	○	○	○
- Collective Agreements	●				●			
- Employees	○				○			
ENVIRONMENTAL ASSESSMENT REQUIREMENTS								
Construction	○	○	○	○	○	○	○	○
Abandonment	○	○	○	○	○	○	○	○
Railway Operation	○	○	○	○	○	○	○	○
Exit	○	○	○	○	○	○	○	○

"●": a matter covered by federal legislation also addressed in provincial legislation.

"○": a matter NOT covered in provincial legislation.

ECONOMY

Highlights of 1993

Demand and Output

Due to weaknesses in consumer spending, the recovery of Canadian economic activities remained rather modest in 1993. During the last half of the year, however, recovery became more broadly based and achieved some staying power. Regions shared unequally in the strengthening of the economy.

The lower value of the Canadian dollar contributed to the strong growth of exports — the main contributor to growth, especially exports of manufactured goods.

Pressures to improve efficiency and reduce costs also affected the public and regulated sectors in 1993.

Employment

Competitive pressures forced firms to keep costs down, which kept employment and wage gains modest. Employment declined in Atlantic Canada, rose modestly in Central Canada, and rose significantly in Western Canada.

Inflation

Inflation remained subdued due to pressure exerted by excess capacity in goods markets and slack in the labour market.

Monetary Conditions

The value of the Canadian dollar and short-term interest rates declined in response to low inflation and moderate economic expansion.

Economic Conditions in Major Industrialized Countries

Despite economic expansion in the United States, the international economic environment remained weak.

Transportation and Socio-Economic Activities

Transportation services and their costs determine the "geographic reach" of socio-economic activities. The relative importance of transportation costs to total product/service value underlines the importance of transportation to each socio-economic activity. The minimization of transport costs is not only an important factor when it comes to decide where to locate in relation to customers and markets. It also determines relative competitiveness for both transportation and socio-economic activities.

The transportation system of a country is tightly interrelated with its socio-economic system. The transportation system usually affects the way in which socio-economic activities grow and change. Then, in turn, changes in the socio-economic system call for changes in the transportation system. This interrelationship is fundamental.

*As the economy rolls ahead,
so do transportation firms.*

The performance of Canadian transportation firms cannot be dissociated from market developments that shape the conduct of consumers of transport, that impose structural changes and adjustments in the marketplace, or translate into changes in needs. Performance is a concept which embraces many others — cost competitiveness, and production and distribution efficiency. Performance also reflects the ability of a firm to innovate and to adjust to changing market conditions.

In its previous reviews, the Agency reported that transportation firms were operating in an environment which made it hard to pass on cost increases to users. In part, the pressures placed on transportation firms to lower their prices are directly related to the financial situation and competitive environment faced by Canadian businesses. These pressures have forced transportation firms to multiply initiatives aimed at trimming, as much as possible, the costs of their operations.

This section gives an overview of the performance of the Canadian economy in 1993 and previous years. This overview concentrates on key socio-economic indicators that influence the performance of the Canadian transportation sector.

The Canadian Economy

*The Canadian economy
remained in low gear.*

In 1993, Canada's pre-recession output levels were finally surpassed. This was made possible by a second year of double-digit export gains to the United States as well as investments in productivity-enhancing equipment. But, overall, indicators show that the economy has improved at a slow pace. An easier monetary environment (i.e. lower interest rates) and the stimulus provided by the U.S., should have filtered

through the domestic economy to boost business and consumer confidence. Yet economic indicators pointed to a weak domestic scene, reflecting what has been called by analysts "the lethargy of a major portion of the Canadian economy". Despite productivity improvement, companies continued to struggle to keep costs in line.

The performance of the economy in 1993 was influenced by:

- low consumer confidence due to employment uncertainty;
- provincial tax increases; and
- restraint throughout the public sector.

Sectoral Overview

Despite the economy's revival, output in numerous Canadian industries was flat or declining.

In 1993, much of the "new economy" — high-tech equipment/software sector, telecommunications and other electronic equipment — was languishing. The exception was the business machines production sector. Many resource markets were depressed. Goods outpaced services production.

Motor vehicle purchases have been declining since 1988. Total new motor vehicle sales declined by less than three per cent in 1993, the result of a more than seven per cent decline in passenger car sales and a five per cent increase in sales of trucks, vans and buses.

Housing starts east of the Rockies bordered on an eight-year low in 1993. Despite the negative effects of job uncertainty, improved affordability, helped by record low interest rates, pushed housing starts upward at year end while house sales improved. In turn, this activity led to increased sales of furniture, appliances and other durable goods.

Losses have declined substantially in Canada's forest products industry. Lumber and panelboard producers returned to profitability. Lumber prices moved upward while the prolonged slump in pulp and newsprint prices took a big toll on earnings.

In British Columbia, lumber production in 1993 was up by less than two per cent from 1992. In comparison, lumber production from sawmills east of the Rockies increased by more than 16 per cent that year. Production of construction-type plywood increased marginally.

Weak domestic demand took a heavy toll on firms geared to local markets.

Three-quarters of the major industries were operating at levels below their pre-recession peaks. Retail, plastics, textile and transportation industries remained below their pre-recession level of activity. Yet, manufacturers' shipments showed almost two full years of uninterrupted growth. If the declines in motor vehicle parts and accessories shipments are excluded, the increase is even more significant. Even so, despite a sharp pick-up in performance in the past year, manufacturing showed production at four per cent below early 1989 levels.

During the second half of the year, manufacturers increased their production which, in turn, translated into gains for trucking services.

Retail trade steadily increased from March, 1992, before slowing at the end of the third quarter of 1993. The trend for the general merchandise trade sector has been relatively flat over the past three years, dampening the growth of total retail sales.

Wholesale trade increased steadily in 1993. Wholesalers interact with various sectors of the economy by buying and selling goods. They deal with importers, manufacturers and other wholesalers. They sell to other wholesalers, to retailers, household consumers, industrial and commercial users and to foreign markets. Growth in wholesale trade in 1993 signalled an improving situation but it occurred mainly in British Columbia, Saskatchewan, Alberta, and to a lesser extent in Ontario and Quebec.

**Key Economic Indicators
1993 in relation to 1992**

	%
Real GDP	+2.4
Merchandise Exports (volume)	+10.2
Personal expenditure on goods and services	+1.6
Goods-Producing Industries	+3.3
Manufacturing	+4.9
Service-Producing Industries	+2.4
Personal Disposable Income	+2.7

Sales of natural gas were up by approximately six per cent in 1993 while production increased by 11 per cent. The increase in sales came mainly from robust growth in exports as well as commercial and industrial sales resulting from inventory replacement.

Drilling surged by roughly 80 per cent in 1993, the best increase in eight years, alongside a further nine per cent gain in natural gas export volumes.

The increase in crude oil production in 1993 was about four per cent.

Primary-forms production of steel was up by almost four per cent in 1993 and steel pipe and tubing production was up by more than 30 per cent.

The projected increase for 1993 in both volume and value of coal production did not materialize. In fact, the world coal price fell.

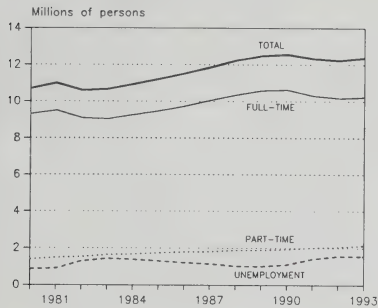
Overall, profitability was slowly improving in 1993; yet earnings accounted for one of the lowest shares of national income in half a century, a situation which greatly reduced the ability to invest.

Employment

Since 1990, the number of full-time positions has dropped by more than 400,000 while part-time hirings grew. Nearly 60 per cent of employment growth in 1993 was accounted for by part-time workers. Since the employment trough in April 1992, part-time employment grew by 155,000 positions.

Despite the improved performance of the economy in 1993, only 43 per cent of the employment losses during 1991 and 1992 were recovered.

FIGURE 3.1
Employment in Canada



The unemployment rate improved marginally in 1993 compared with 1992.

Modest employment gains reported for some months of the year were eliminated by declines during others. At year end, employment gains were noted in residential construction and in special trade contracting, reflecting stronger housing starts and sales of lumber and building materials. Employment increases were observed in most provinces in 1993. British Columbia benefitted from the largest increases; only Newfoundland, Ontario and Alberta experienced employment declines. Retail employment fell while employment losses in the goods-producing industries slowed in 1993, after three consecutive years of substantial losses. In the manufacturing sector the focus on cost-containment and productivity impeded job creation. Overall, job prospects remained uncertain in 1993.

The growth of average-weekly earnings continued to slow in 1993. Lower wage settlements, payroll cuts and a shift in employment towards lower-paying industries contributed to the low growth in average weekly earnings.

Consumer Expenditures

In 1993, households and businesses remained cautious spenders. Record levels of household debt relative to disposable income and double-digit unemployment rates, continued to depress consumers' confidence. Nevertheless, retail sales revived somewhat, partly because exchange rate depreciation reduced cross-border shopping and encouraged tourism.

Despite Canada's very favourable inflation performance, sizeable tax increases in various provincial budgets (Ontario, Quebec, British Columbia) and hiring and wage restraints throughout the public sector restrained consumer spending through 1993. Since the beginning of the decade the yearly gains in disposable income have not always matched inflation.

Prices

For 1993, the increase in the Consumer Price Index was 1.8 per cent, compared to 1.5 per cent in 1992.

Base metal prices dropped in 1993 and, as a result, demand from the U.S. was strong.

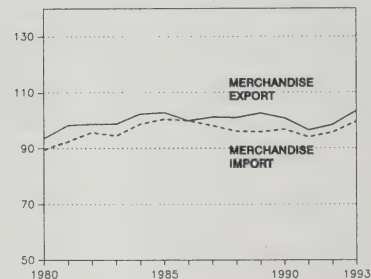
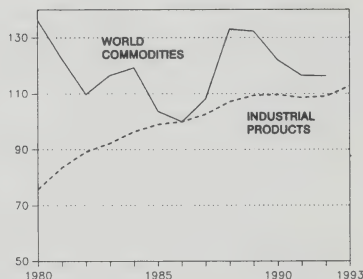
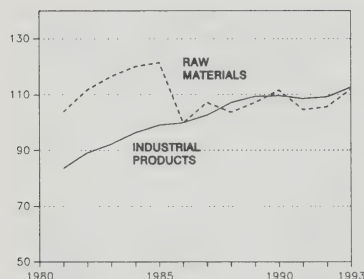
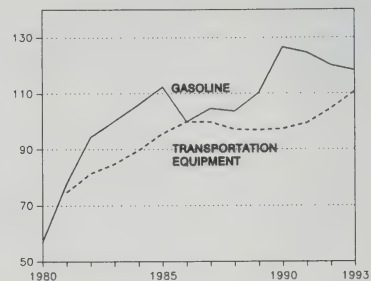
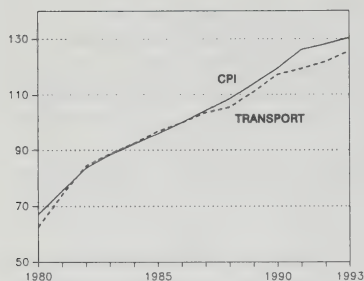
Crude oil prices plunged to a five-year low in December, 1993, as lingering recessions in Europe and Japan undercut international demand. Natural gas prices had a 30 per cent increase.

The lumber, sawmill and wood products price index showed a second year of substantial increase.

Cautious consumers blocked economic recovery.

Inflation remained below two per cent.

PRICE INDICES OF RELEVANCE TO TRANSPORTATION 1986 = 100



Financial Market Conditions

The Canadian dollar skidded a few cents while nominal interest rates reached their lowest levels in over 20 years.

Financial market conditions in Canada were favourable to growth. A weak recovery, and an inflation rate below two per cent, led the Bank of Canada to gradually ease its monetary policy. As a result, interest rates fell to their lowest levels in over two decades. Interest spreads between the U.S. and Canada were narrower. The drop in money market rates during 1993 encouraged foreign investment in Canadian government securities and corporate equities. The depreciation of the Canadian dollar along with restructuring and intense cost cutting by industries have boosted competitiveness.

External Trade

The Canadian economy moved in lock step with that of the U.S.

Export-oriented industries led the recovery. Producers of motor vehicles and parts, lumber and other forest products, and natural gas have benefitted from strong U.S. sales and the depreciation of the Canadian dollar. In fact, exports to the U.S. rose by almost 20 per cent last year again providing most of the sustained growth. Exports to Japan and non-OECD countries were also higher.

Exports of chemicals, plastics and fertilizers increased in 1993. Machinery and equipment exports increased substantially. Exports of crude oil were up by approximately nine per cent. Pipeline exports and imports of crude oil increased in 1993.

The surge in demand for productivity-enhancing equipment observed in the past few years, has been largely satisfied by foreign suppliers. Imports increased by approximately 15 per cent in 1993. Imports from the U.S. and from non-OECD countries showed the largest increases. Increased imports were observed for all major commodity groups except energy products.

Canada has recently entered into several trade agreements and discussions because of its high dependence on trade: the Canada-U.S. Free Trade Agreement, the North American Free Trade Agreement and the Uruguay round of global trade talks at the GATT. In negotiating these agreements, Canada's goal has been to open and enshrine access to markets, so that business could respond successfully to the challenge of a changing and highly competitive global marketplace.

Regional Economies

Restructuring, movements in commodity prices and the depreciation in the value of the Canadian dollar had diverse impacts across Canada.

Problems with the fishery and related activities continued to weigh heavily on the Atlantic region.

In Newfoundland, the Hibernia project helped create jobs. Newfoundland's provincial government announced severe cutbacks on operations. The effects of the moratorium on the northern cod fishery and the reduction in groundfish quotas were somewhat offset by the compensation/training program introduced for fishery workers.

In Nova Scotia, job losses persisted, and the unemployment rate remained high. The squeeze resulting from reduced fishery operations was less severe, as the shellfish industry cushioned the blow from reduced groundfish quotas.

Activity continued to pick up in Prince Edward Island, as the more favourable exchange rate boosted the tourist industry. Firm lobster prices and the return of Island potato seed stock into U.S. markets benefitted the province's economy.

New Brunswick was the growth leader in Atlantic Canada, with employment outpacing the regional average. Among the factors which led to this growth, were the rebound in lumber prices; rising lumber shipments to the U.S. Northeast; the moderate recovery in U.S. demand for lightweight coated magazine paper and newsprint; Purolator's and Unitel's new customer-service centres; Edmundston's new textile plant; and the start-up of Belledune's coal-fired electricity plant.

Consumer spending was dampened by fiscal measures introduced in both Ontario and Quebec.

Ontario and Quebec provincial budgets contained tax increases which impeded economic activity. Lower revenues and higher expenditures pushed budgetary deficits to record levels. Both provinces experienced slow-motion recovery and export revival did not spill over into consumer spending. Employment is still below the peak reached in early 1990. Auto output has given a lift to manufacturing while housing activity was weighted down by depressed prices and the large number of resale listings.

Growth in Manitoba was also limited by fiscal retrenchment. Mining activity was hurt by weak markets for stainless steel and by soft nickel prices.

Saskatchewan's economy also felt the effect of government spending cuts and big tax increases. Wheat export volumes dropped.

Alberta's economy was boosted by a significant pickup in oil and gas drilling, expansion of the Nova pipeline system, and strong natural gas exports. Employment gains were held back by rationalization initiatives and by the tapering off of housing starts.

British Columbia's economy was fuelled by domestic demand and a pickup in export.

British Columbia remained insulated from the recession, with strong immigration and job creation. Although consumer spending and residential construction held up, the resource sector was hit by weak commodity prices, except for lumber prices. Consumer price inflation was almost twice the national average.

Global Economic Outlook

The international economic environment was not very strong.

In 1993, the major industrialized economies were out of synchronisation. Signs of recovery were observed in North America and the United Kingdom while protracted recession occurred in Continental Europe and Japan.

Overall, high unemployment and excess availability of products has kept inflation in check. This has led to the adoption of accommodative monetary policies such as low interest rates.

United States

The pace of economic expansion in the U.S. picked up.

Economic expansion in the U.S. continued during 1993. Fourth quarter growth increased significantly. Employment uncertainty plaguing consumers' confidence, a drop in non-defense durable goods orders and tax increases held back the economy. On the plus side, employment rose.

Poor economic performance and lower interest rates of European economies, coupled with the gradual recovery in the U.S., benefitted the

dollar vis-à-vis the European currencies. The firm dollar, supported by a comparatively solid economic performance, helped U.S. financial markets and enhanced the attractiveness of U.S. investments. Significant profits have allowed businesses to invest in productivity-enhancing equipment. The expansion of the U.S. economy was driven by industrial production and strength in the housing market.

United Kingdom

The British economy showed signs of emerging from recession: manufacturing output and industrial production increased; the volume of retail sales rose; the number of unemployed was reduced; the GDP increased; and inflation reached the lowest level in decades. The economic revival was consumer-led, aided by a stimulative monetary policy. Growth was constrained by big tax hikes.

Germany

The German economy continued to weaken rapidly, showing signs of a deepening recession. Domestic and external demands for Germany's products were weak; a number of well-known companies saw their profits decline sharply (e.g. Volkswagen, Daimler-Benz) and some were forced to close plants (Krupp-Hoesch). Manufacturing production was down. Unemployment rose despite easing interest rates. The German government adopted fiscal retrenchment measures which impeded recovery.

France

The economic performance of France was better than other European countries, yet its economy remained weak and unemployment climbed.

Italy

The recession in Italy was cushioned by lower exchange rates, which triggered a surge in exports.

Japan

Japan's economic and political situation was uncertain in 1993. As a result, output declined and fiscal and monetary stimuli were unable to revive growth.

The Japanese economy remained relatively weak at home. Restrained consumer spending translating into lower auto sales, and a softening labour market, were indicators of the weakness of the domestic economy of Japan. The weak domestic economy, soft oil prices and exchange-rate appreciation helped to control inflation. The Japanese yen made

Major industrial countries overseas went through a period of shrinking economic activity.

The bright spots in the world's economy were in Southeast Asia and Latin America.

significant gains against the U.S. dollar and also gained ground against the European currencies. The strong yen undercut exports.

Emerging Economies

Top performing economies were found in Southeast Asia. Double-digit output growth in *China* was driven by economic reforms and foreign investment. *Malaysia* and *Thailand* benefitted from a surge in foreign investment coming mainly from the outsourcing of Japanese production. Growth remained solid in *Taiwan* despite the increased competition from lower-cost producers. As a result of improved trade performance, the *South Korean* economy has strengthened. *Mexico* faced a setback in 1993 despite fiscal stimulus and a strong U.S. demand. *Chile* benefitted from solid growth emanating from investment and consumer spending.

An Outlook on Trends that have Influenced Canada's Transportation Industry

Overview of the Canadian economy

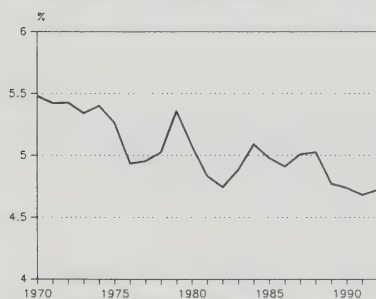
Among the factors which contributed to the recent performance of the Canadian transportation industries, the relative competitiveness of the Canadian economy has to be one of the key fundamental factors. Competitiveness cannot be measured in absolute terms; it evolves over time as it responds to broad overall economic developments.

For the Canadian manufacturing sector, the deterioration of its cost-competitive position relative to the U.S. was particularly dramatic over the period 1980 to 1992. Yet, for the non-manufacturing industries, which account for approximately 80 per cent of Canada's total economic activities, productivity grew between 1980 and 1992 at a more rapid pace than in the U.S. Although the Canadian dollar depreciated slightly from 1980 to 1992, the deterioration of Canada's cost competitiveness compared to the United States over that period was the result of productivity growing at a slower pace than labour compensation.

In the first half of the 1980s, Canada's cost competitiveness relative to the United States improved substantially. During that period, labour compensation grew more rapidly in Canada than in the United States but it did not translate into a loss of competitiveness, being more than offset by the lower value of the Canadian dollar relative to the U.S. currency. From 1987 to 1991, the strong growth in labour compensation continued in Canada; over that period the Canadian dollar appreciated. This led to a deterioration in cost competitiveness. This appreciation of the Canadian dollar was dictated by rising commodity prices and the vigorous pace of domestic activities. Together these trends led to

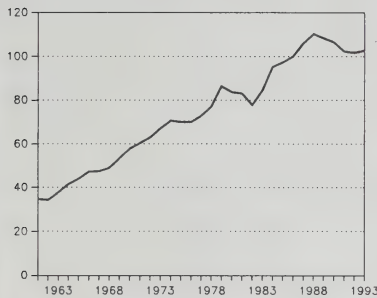
FIGURE 3.2

Transportation GDP as a percentage of Total GDP



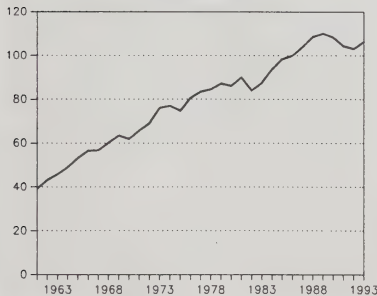
GDP and Transportation product at factor cost in 1986 prices

FIGURE 3.3
GDP Trends - Transport Sector
1986 = 100
1961 - 1993



Preliminary data for 1993

FIGURE 3.4
GDP Trends - Goods Producing Industries
1986 = 100
1961 - 1993



Preliminary data for 1993

domestic labour compensation increases and to firm monetary conditions. The significant depreciation of both the Canadian and U.S. dollars with respect to the yen and major European currencies in the mid-eighties eased the competitive pressures from these overseas competitors. Japan and European countries are substantially less significant to Canada's trade than the United States.

Along with this deterioration of Canada's cost competitiveness were the pressures in the late 1980s and early 1990s of an economy affected by recessionary demand levels. For Canadian businesses, the recession was the toughest of the post-war period. The downturn of the Canadian economy was more significant than the one observed in the U.S. Industrial corporations, which all require transportation services, suffered the most, their net profits reaching a 15-year low. Overall, corporate profits' share in total income remained low in 1993 by historical standards. The burden of structural adjustment needed to improve competitiveness impacted on the transportation industry. Canadian corporations, to stay afloat, had to trim costs, and transportation costs were included. This meant that transportation firms were also forced to trim their costs to help restore their clients' competitiveness.

In this environment of lessened competitiveness, Canadian producers also had to face a truly global economy. Communication and transportation are much cheaper and faster than before. Modern industrial technologies have become available to a much wider range of countries. Global awareness has increased and transportation firms have had no choice but to be more outward looking. With the accelerated trend towards globalization, Canadian businesses, including transportation firms, have had to pay more attention to efficiency and flexibility. The more open international trade in goods and services has required the introduction of productivity-enhancing measures. The gains from such measures have not yet fully materialized. Because of the importance of trade to Canada's economy, and because transportation is an essential part of the trade equation, transportation firms have had to work with all other trade partners to face the new challenge.

In 1988, the first year of enactment of transportation's economic regulatory reform legislation, 58 per cent of Canada's GDP was generated from personal expenditures on goods and services. By 1992, that proportion had reached 61 per cent. Yet, in constant dollar terms, personal expenditures on goods and services in 1992 barely surpassed its 1988 level. After peaking in 1989, consumer spending dropped off sharply, explaining why corporate returns dropped so low during the most recent recession, barely covering interest charges. The interest-coverage ratio, which measures cash flow (profits before income taxes, interest and depreciation) in relation to interest on debts, remained weak in 1993 and was at a level no higher than the level reached during the worst of the 1981-82 recession. This is a precarious situation given that indebtedness has risen continuously since 1988.

FIGURE 3.5
Bankruptcies in Canada
1979 - 1993

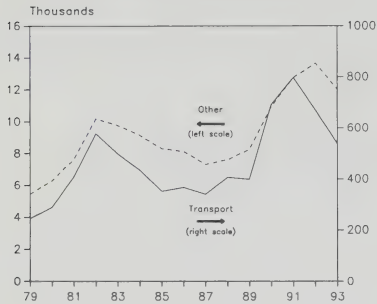
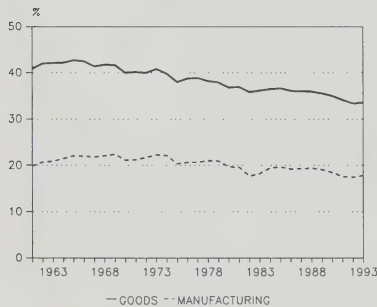


FIGURE 3.6
Shares of Goods and Manufacturing Production
in the Canadian Economy
1961 - 1993



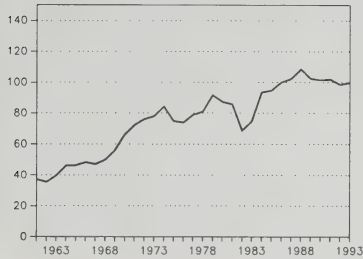
Preliminary data for 1993

Plunging profits during the recession, as well as stagnant industrial prices and a stronger dollar, reduced the self-financing capacity of companies, a situation made worse by some corporations' decisions to maintain shareholders' dividends. Businesses had to borrow to finance their capital spending needs. Even though profits improved in 1993, they were still well below pre-recession levels. Investment spending, however, has remained strong since 1988, despite companies' financial difficulties. Since the stock market crash at the end of 1987, it has been more difficult for companies to raise share capital on stock markets. In transportation, common stock financing was used between 1988 and 1993 by firms such as: Air Canada (mainly to achieve its privatization), PWA, Air Transat, Royal Aviation, and Laidlaw.

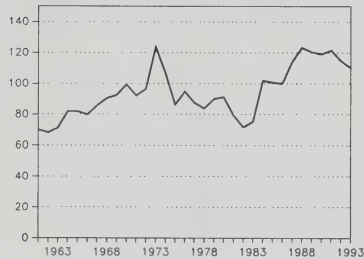
The structure of the Canadian economy has been changing. There has been a long-term shift from goods to services. (Figure 3.6) Within the goods sector, manufacturing has displayed the same declining trend. This trend has had its impact on the changes in the volume of freight transported. Over the most recent years, transportation firms have had to confront both the fallout from the debt and inflationary excess of the late 1980s and the restructuring in the economy. Demand for transportation services has been sluggish, pressing prices downward. Global demand has also affected the demand for transportation services by changing trade flows and by exercising downward pressures on transportation prices. For instance, raw materials prices have been declining and for a resource-based country like Canada, the decline in world raw material prices negatively impacted on Canada's resource-sector competitiveness. Consequently, transportation firms moving raw materials have had to face these global pressures. Nonetheless, Canada's relative competitive situation began to improve in 1992. Some investment projects made in the late 1980s have come on stream and their positive effects have started to be felt and to translate into improved efficiency. The improvements in 1992 and 1993 have also been positive for transportation firms.

GROSS DOMESTIC PRODUCT BY INDUSTRY
AT FACTOR COST - AT 1986 PRICES
1961 TO 1993 * 1986 = 100**
(Preliminary data for 1993)

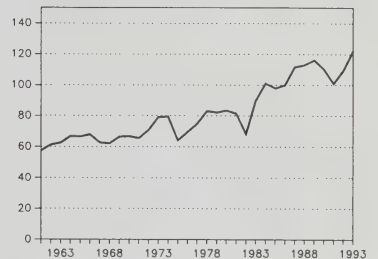
RAIL TRANSPORT



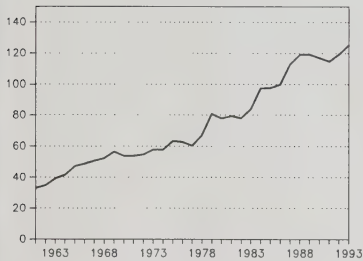
MINING



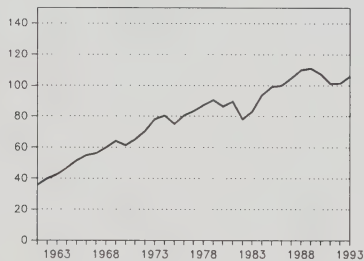
LOGGING AND FORESTRY



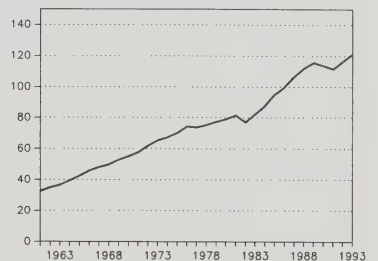
TRUCKING



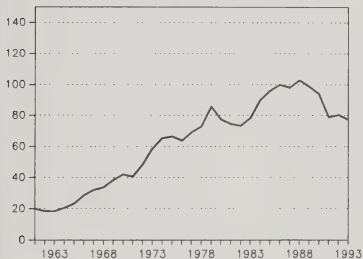
MANUFACTURING



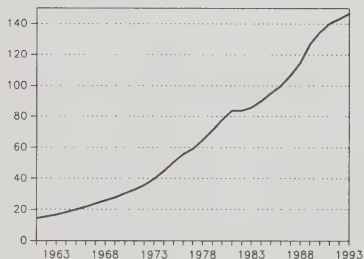
WHOLESALE AND RETAIL TRADE



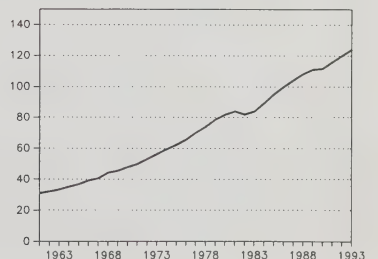
AIR TRANSPORT



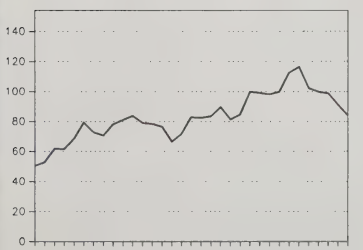
COMMUNICATION INDUSTRIES



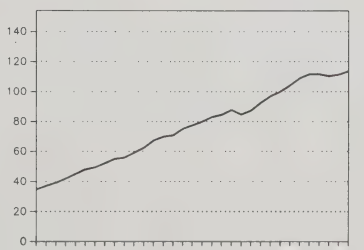
FINANCE INDUSTRIES



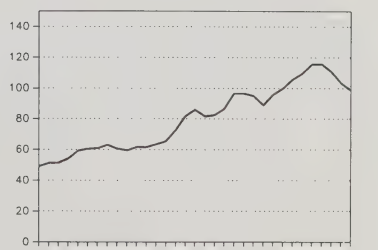
WATER TRANSPORT



TOTAL ECONOMY



CONSTRUCTION



INDUSTRY STRUCTURE

Highlights of 1993

Air

Air Canada cut costs, improved productivity, and expanded its global network through a series of alliances with international carriers, including an investment in Continental Airlines. PWA Corporation pursued its restructuring plan, but its deal with American Airlines was opposed by Air Canada. PWA rejected two Air Canada offers for Canadian Airlines' international routes.

Nationair failed, but existing charter carriers filled the void, and several new carriers sought licences.

Rail

After incurring heavy losses in 1992, CN North America and CP Rail System continued to rationalize their operations by abandoning, selling or sharing unprofitable lines.

Faced with stiff competition from trucking companies, U.S. railroads, and shipper demands for seamless North American service, CN and CP Rail entered into several intra- and intermodal alliances.

Extra-Provincial Trucking

Although trucking bankruptcies were down in 1993, rationalization was still prevalent within the trucking industry. Many companies forged alliances with U.S. trucking companies in order to strengthen their position in North American markets.

Marine

Shipping lines continued to join in cooperative agreements to enhance their scope of operations, rationalize capacity, and reduce costs. Consolidation of the bulk shipping industry continued on the Great Lakes/St. Lawrence Seaway system.

Introduction

This section outlines the composition of the transportation industry in Canada, identifies the major companies, and reviews the key initiatives undertaken by these firms in response to economic and competitive forces that are influencing the Canadian industry.

In response to the sluggish recovery of the Canadian economy, carriers in all modes restructured their operations by adopting measures designed to cut costs and improve productivity, all with a view toward repositioning themselves for the economic recovery. Faced with increased domestic and international competition and shipper demands for seamless transportation services, many carriers entered into both intra- and intermodal alliances with Canadian and foreign carriers.

Air

In 1993, the structure of Canada's air transport industry continued to be dominated by two large carrier networks grouped around Air Canada and Canadian Airlines International (Canadi*n or CAIL). The rest of the industry consists of several large jet charter carriers, independent regional airlines and dozens of smaller air carriers operating in a variety of domestic and international market segments. Air Canada and Canadi*n account for approximately 69 per cent of all air passenger and freight revenue earned in the Canadian air transport industry.

Air Canada

Air Canada expanded its global network by implementing strategic alliances with major foreign air carriers.

In April 1993, Air Canada concluded an US\$85 million equity investment in Continental Airlines for a 24.5 per cent voting interest, along with a major strategic alliance involving several areas of joint cooperation. Air Canada will provide maintenance services to Continental and the two carriers will coordinate schedules, share airport facilities and ground handling, and allow reciprocal frequent flyer point collection and redemption.

In April 1993, Air Canada also entered into alliances with Air France and, as part of its Pacific Rim strategy, with Korean Air.

Air Canada pursued its strategy for a "made-in-Canada" air transportation policy.

Throughout 1993, Air Canada continued to oppose AMR's proposed C\$246-million investment in Canadi*n on several fronts. Air Canada contended that Canadian consumers would be better served by an airline industry comprised of one strong international carrier and several domestic competitors. Accordingly, in August 1993 Air Canada made an offer to purchase the international business of Canadi*n and, on December 16, 1993, sweetened its offer.

Air Canada's Offers to PWA Corporation

Air Canada's first offer to PWA on August 18, 1993, included \$200 million cash for Canadi*n's international business; offers of employment to CAIL cockpit and cabin crews involved in the acquisition, subject to negotiations with the respective unions; assumption of \$800 million of PWA's debt and lease obligations for three Boeing 747-400s and five Boeing 767-300s; CAIL restructuring its operation into a domestic, transborder and charter carrier; CAIL remaining in the Gemini computer reservation system until it has a right to withdraw in 1999; and freedom for CAIL to proceed with all other aspects of the AMR deal or with strategic relationships with other domestic or foreign carriers.

The second offer made by Air Canada to PWA on December 16, 1993, was similar to the first offer, except that Air Canada increased the amount of cash offered to Canadi*n from \$200 million to \$250 million; added an additional \$118 million in cash and/or assumed debt for spare parts inventory and equipment; specified that it would offer employment to approximately 1,000 CAIL flight crews and international employees; suggested that PWA join Aeroplan; and at PWA's option, provide substantially the same management services package as AMR for approximately C\$70 million a year, and consider employment offers to displaced PWA personnel.

*PWA Corporation pursued its restructuring plan, including a planned alliance between Canadi*n and American Airlines.*

On January 26, 1994, Air Canada announced that it was stopping all litigation preventing Canadi*n from closing its deal with AMR. In February, 1994, a day before being designated to serve Osaka, Japan, Air Canada announced that it had resolved its disagreement with PWA Corporation (PWA) over the transfer of CAIL's hosted services from Gemini to Sabre and that it had concluded an agreement with Galileo International to form a new computer reservation system company to replace the Gemini Partnership in Canada.

In 1993, Air Canada's regional affiliates continued to consist of Air Nova, Air Alliance, Air Ontario, AirBC and NWT Air.

Most of Air Canada's presence in the North is maintained through its northern-based affiliate NWT Air. NWT Air also has its own northern connector network consisting of four airlines - Air Tindi, Aklak Air, Buffalo Airways, and Northwestern Air Lease. Although it code shares with these carriers, NWT Air has no equity interest in them.

Other Air Canada Connectors - AirBC, Air Alliance (which code shares with Air Schefferville) and Air Nova all serve several points in the north within their respective operating areas. Air Ontario does not provide service to any northern points.

Canadi*n

During 1993, PWA, Canadi*n's parent company, continued to implement its restructuring plan first announced in November 1992. The main elements of the restructuring plan include:

- capacity reductions;
- debt restructuring;
- a service and marketing agreement with AMR;
- a \$120- to \$150-million equity investment in PWA by its employees;
- loan guarantees totalling \$290 million by the federal government and three provincial governments;
- a corporate reorganization; and
- a \$246-million equity investment in Canadi*n by AMR.

Under the agreement, AMR invests \$246 million in Canadi*n, provides certain technology-based services to Canadi*n and participates in certain joint marketing efforts. A marketing alliance between Canadi*n and American Airlines, which allows mileage accumulation on each other's frequent flyer programs, was concluded and implemented in early 1993.

FIGURE 4.1: Air Canada Connectors

Carrier	Network	Fleet
Air Nova (100% owned by Air Canada)	20 destinations in the Atlantic provinces and Quebec; Ottawa; Boston and New York.	5 jets 10 non-jets
Air Alliance (75% owned by Air Canada ; code-sharing agreement with Air Schefferville)	15 destinations in Quebec and in Ontario; Boston and New York.	14 non-jets
Air Ontario (75% owned by Air Canada)	16 destinations in Ontario; Montreal and Winnipeg; Baltimore, Cleveland, Hartford, and New York.	21 non-jets
AirBC (85% owned by Air Canada ; owns 50% of Pacific Coastal Airlines)	29 destinations in British Columbia, Alberta, Saskatchewan and Winnipeg; Seattle and Portland.	5 jets 28 non-jets
NWT Air (100% owned by Air Canada ; code-sharing agreements with Air Tindi , Aklak Air , Buffalo Airways , and Northwestern Air Lease)	8 destinations in the Northwest Territories; Calgary, Edmonton, and Winnipeg.	3 jets 1 non-jet

FIGURE 4.2: Canadian Partners

Carrier	Network	Fleet
Canadian North (a division of Canadian Airlines International)	20 destinations in the Northwest Territories, Quebec, Manitoba, and Alberta.	5 jets
Air Atlantic (45% owned by PWA Corporation)	20 destinations in the Atlantic provinces, Quebec, and Ontario; Boston.	3 jets 11 non-jets
Inter-Canadien (70% owned by Canadian Regional Airlines ¹ ; code-sharing agreement with Alexandair)	25 destinations in Ontario, Quebec, and Labrador.	8 non-jets
Canadian Regional East (a division of Canadian Regional Airlines)	11 destinations in Ontario; Montreal and Winnipeg.	7 non-jets
Calm Air (45% owned by Canadian Regional Airlines)	25 destinations in northern Manitoba and the Northwest Territories; Winnipeg.	8 non-jets
Canadian Regional West (a division of Canadian Regional Airlines)	34 destinations in British Columbia, the Prairie provinces, Ontario, the Northwest Territories, and the Yukon; two destinations in the U.S.	7 jets 19 non-jets

¹ Canadian Regional Airlines Ltd. is a wholly-owned subsidiary of PWA Corporation.

UNTANGLING GEMINI

- | | |
|--------------------------|--|
| June 1, 1987 | Air Canada and PWA merge their independent computer reservation systems (CRSs) to form Gemini Group Automated Distribution Systems; Covia Canada joins on June 30, 1989. |
| July 7, 1989 | The Competition Tribunal allows the merger of the two CRSs to proceed and issues a Consent Order specifying a code of conduct for the operation of CRSs in Canada and requiring Gemini to provide other CRSs, specifically SABRE, with complete and equal access to last seat booking. |
| November 5, 1992 | The Director of Investigation and Research applies to the Tribunal to vary the Consent Order because it impedes pro-competitive solutions to PWA's financial difficulties and increases the likelihood of a monopoly in Canadian airline markets. |
| December 29, 1992 | PWA announces the signing of an alliance with AMR Corporation which requires, among other things, that Canadi*n transfer the hosting of its internal reservation system from Gemini to AMR's Sabre. |
| April 22, 1993 | The Tribunal rules that it does not possess the jurisdiction to vary its 1989 Consent Order but that if it did, it would have allowed Canadi*n to transfer the hosting of its internal reservation system from Gemini to AMR's Sabre. |
| May 27, 1993 | The Agency finds that the proposed acquisition of an interest in Canadi*n by an AMR subsidiary "is not against the public interest" and the proposed acquisition is not disallowed. |
| June 23, 1993 | The Federal Cabinet upholds the Agency's May 27, 1993 decision. |
| July 30, 1993 | The Federal Court of Appeal finds that the Tribunal has jurisdiction under the <i>Competition Act</i> to vary the Consent Order. The majority concludes that the Tribunal may order only the dissolution of Gemini or a disposal of shares or assets and only if it is established that the original merger leads to substantial lessening of competition in domestic airline markets. The matter is returned to the Tribunal for reconsideration because the Tribunal did not make sufficient factual findings in its original decision which would permit the Federal Court to make either of these orders. |
| November 24, 1993 | The Tribunal rules that Canadi*n should be allowed to leave Gemini and if Canadi*n and Air Canada fail to work out an arrangement by December 20, 1993, Gemini will be dissolved by November, 1994. |
| December 15, 1993 | Talks between Air Canada and PWA to resolve the Gemini impasse break-off in failure. |
| December 23, 1993 | Gemini appeals the Tribunal's November 24, 1993 decision to the Federal Court of Appeal; Air Canada files its appeal on December 24, 1993. |
| January 26, 1994 | Air Canada announces it will drop all legal challenges to the PWA-AMR deal. |
| February 15, 1994 | Air Canada and PWA announce the signing of an agreement to resolve all outstanding matters relating to the transfer of CAIL's hosted services from Gemini to Sabre and that all parties, including Gemini and Covia, agreed to abandon all appeals of the Tribunal's November 24, 1993 Order. Air Canada and Galileo International announce an agreement to create a new CRS company, Galileo Canada, to replace Gemini in Canada. |

In order to realize the benefits of the strategic alliance with American Airlines, Canadi*n must transfer the hosting of its reservation system from Gemini to AMR's Sabre system. This led to a protracted legal battle with Air Canada, The Gemini Group Automated Distribution Systems Inc. and The Gemini Group Limited Partnership (Gemini) and Covia Canada Corp. and Covia Canada Partnership Corp. (Covia) in several venues over the Gemini computerized reservation system. The matter was finally resolved in February, 1994 with the signing of an agreement between PWA and Air Canada and the dropping of all appeals by Air Canada, Covia and Gemini.

PWA's restructuring plan also includes the simplification of its corporate structure by reorganizing and transferring its investments in substantially all its subsidiaries and other operating assets to Canadi*n.

During 1993, PWA's Board of Directors unanimously rejected two offers from Air Canada for the international routes of Canadi*n and debt assumption against certain associated flight equipment.

In 1993, Canadian Regional Airlines proceeded with a reorganization announced in 1992, which merged Canadian Regional, Time Air, Ontario Express, and Canadian Frontier into a single company - Canadian Regional Airlines Ltd. Canadian Regional now operates with west and east divisions, operating the airline networks previously served by Time Air and Ontario Express. The merger was undertaken to streamline operations and reduce overheads by centralizing management systems, fleet planning, scheduling and marketing functions. Inter-Canadien, Air Atlantic and Calm Air also continued to operate as Canadian Partners, while Canadian North continued to operate as a separate division of Canadi*n in northern Canada.

Canadian North operated passenger and cargo services across an extensive northern network using seven B-737 combi aircraft. Canadian North code-shares with Ptarmigan, which is based in Yellowknife, and serves several smaller communities not suitable for large jet service.

Canadian Regional-West, Calm Air, Air Atlantic, and Inter-Canadien (which code-shares with Alexandair in northern Quebec) all serve several northern points in addition to their extensive southern networks. Canadian Regional-East serves no northern points as a result of a strategic decision to concentrate on larger Ontario markets with a single aircraft type.

Independent Air Carriers

The most significant structural change within the large charter airline segment in 1993, was the cessation of service in May, by **Nationair**, Canada's largest charter carrier and third largest carrier. Events that led to Nationair's collapse included fare and market share battles in the Ottawa-Montreal-Toronto triangle, asset seizures by creditors, and

The independent airlines in Canada continued to adapt to rapid changes in the economy and the airline industry.

adversarial labour relations. At the time it withdrew from the Canadian charter market, Nationair's available seat capacity was larger than the combined capacity of its competitors — Canada 3000, Air Transat, Royal Air and First Air.

Air Transat, a Montreal-based carrier, emerged as Canada's largest charter carrier after Nationair stopped flying. During 1993, Groupe Transat, Air Transat's parent company, issued 43.5-million shares to raise \$19.5 million which was used to refinance several aircraft. In addition, the carrier signed a marketing deal with Sunquest Tours worth approximately \$250 million over five years. Air Transat became the largest operator at Mirabel and, by the end of 1993, had purchased Nationair's Technair hangar at Mirabel airport for \$4.7 million, to use as offices and for its heavy aircraft maintenance.

Groupe Transat also owns several major tour operators including Vacances Air Transat, Air Transat Holidays, Regent Holidays, Chieftain Tours, Tourbec, and Club Voyages. This vertical integration strategy by Groupe Transat permits it to offer a full range of travel-related services including retail travel agency services, travel packages and air transportation.

Canada 3000 positioned itself as the largest charter carrier in the domestic market and developed a major presence in the United Kingdom and numerous sunspot destinations. Although not vertically integrated, Canada 3000 has long-term contractual relationships with Adventure Tours and other tour operators.

Royal Airlines (Royal), which started operations in April 1992, with one aircraft, ended 1993 with five aircraft, including two widebodies. On May 1, 1993, Royal's parent company, Royal Aviation Inc., set up Royal Vacances as a tour operator to market Royal's airline seats. Royal also entered into two agreements in August, 1993 with Sunquest, one of the largest Canadian tour operators operating out of Toronto and serving the Ontario market. The agreements cover the co-ownership and chartering of an L-1011 and an extensive charter agreement between the two companies. Royal Airlines, through its Conifair Division, also provides aerial spraying services and passenger and cargo services to hunting areas in Quebec.

In 1993, **First Air** and **Air Inuit**, both owned by Kuujuaq, Quebec-based Makivik Corporation, continued to be the largest, independently owned airline networks in Canada's North. These two carriers provide extensive network competition to both NWT Air and Canadian North. **First Air** also operated both domestic and international sunspot charters for tour operators during 1993.

Advance Air Charter, a passenger and freight charter company based in Calgary, commenced operations in 1993. With its two long-range

DC-8 aircraft, the airline specializes in international charters in support of the oil and gas industries based in Alberta.

At year-end, several prospective new entrants in the charter sector were in the process of obtaining Agency and Transport Canada regulatory approvals.

During 1993, several new prospective carriers announced their intentions to commence providing service with large jet aircraft in both domestic and international markets. Companies making announcements included Air Club International, LUSO Canadian Airlines, Fortunair Canada, Air Hamilton, Destinair, Sunquest, and Triton Airlines. In fact, Triton, a St. John's Newfoundland-based carrier, operated briefly in April and again in May before being forced to cease operations both times due to licensing issues. At year-end, these companies were at various stages of obtaining the necessary Agency and Transport Canada regulatory approvals.

The remainder of the Canadian airline industry consists of numerous airlines operating in various scheduled and non-scheduled, passenger and freight market niches. Included among the largest of these carriers are: Air Creebec Inc., Air Manitoba Ltd., Bearskin Lake Air Services Ltd., Brooker Wheaton, Helijet Airways Inc., Jetall Holdings Corp., Kelowna Flightcraft, and Provincial Airlines Ltd.

Air Carriers and Licences

Air Carriers

The number of domestic and foreign air carriers serving Canada increased again in 1993.

During 1993, 60 domestic air carriers were licensed by the Agency to provide air services in southern Canada and 48 domestic carriers were issued licences authorizing them to operate to, from, or within northern Canada (which also allows them to operate in the southern sector). In addition, 12 Canadian air carriers were authorized to operate only international charters to or from Canada while 34 carriers were licensed to provide both domestic and either international scheduled or charter air services.

There were two notices of proposed acquisitions filed with the Agency in 1993, including the proposed acquisition of an interest in Canadi*n by Aurora Investments, Inc., a wholly-owned subsidiary of AMR Corporation, and the proposed acquisition of Air Manitoba shares held by Ilford-Riverton Holdings Ltd.

There were 10 bankruptcy filings during the year by carriers authorized to provide scheduled and/or charter air service, including Nationair, Pegasus Helicopters Incorporated and Trans Provincial Airlines Ltd. There were also 112 requests to cancel licence authorities. At year-end, there were 933 licensed Canadian carriers, compared to 893 at the end of 1992.

In addition, 909 foreign air carriers were providing service to and from Canada at the end of 1993; this was up by 13 from the end of 1992. The majority (811) were U.S.-based air carriers.

FIGURE 4.3

Canadian Carriers and Canadian Held Licences

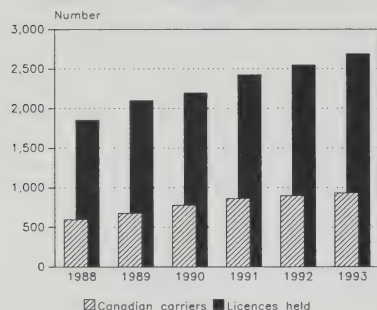


TABLE 4.1

Air Transport Licences: December 31, 1992 & 1993

	1992	1993
Domestic Licences		
Southern Canada	894	934
Northern Canada		
Scheduled	41	45
Non-Scheduled	1,051	1,124
Total Northern Canada	1,092	1,169
Total Domestic Licences	1,986	2,103
International Licences		
Held by Canadian Carriers		
Scheduled	118	121
Non-Scheduled	445	464
Total Canadian-Held	563	585
Held by Foreign Carriers		
Scheduled	171	164
Non-Scheduled	975	1,003
Total Foreign-Held	1,146	1,167
Total International Licences	1,709	1,752
Total Licences	3,695	3,855

At the end of 1993, Canadian carriers held 2,103 domestic licences, up from 1,986 a year ago. Of these, 934 (44 per cent) authorized carriers to provide air service in southern Canada while the remaining 1,169 authorized the holders to provide air service to, from, or within the designated northern area.

The number of international licences held by both Canadian and foreign carriers increased from 1,709 in 1992 to 1,752 in 1993, despite a small drop in the number of international scheduled licences held by foreign air carriers. Table 4.1 shows the distribution of air transport licences issued by the Agency.

Rail

Both CN and CP Rail improved their North American connections through new intra- and intermodal alliances and agreements.

CN North America (CN) and CP Rail System (CP Rail), Canada's two Class I freight railways, accounted for approximately 90 per cent of all rail freight revenues in Canada during 1993, with CN earning about one-third more than CP Rail. The remaining rail freight revenues are generated by the Class II railways, which fall into the categories of either

regional railways, lines in Canada belonging to U.S. railroads, or terminal/switching railways.

CN North America

Government-owned CN operates in eight provinces directly and in the other two through intermodal services. CN's subsidiary, Grand Trunk Corporation, operates three railways in the U.S.: Grand Trunk Western Railroad; the Duluth, Winnipeg and Pacific Railway; and the Central Vermont Railway, a subsidiary put up for sale in 1993. In 1993, CN operated over 30,000 kilometres of line in Canada and the United States.

During the summer of 1993, CN entered into an interline agreement with U.S.-based CSX Intermodal to streamline the flow of highway trailers moving by rail between Canada and the U.S. Southeast and Midwest.

CN also entered into a run-through agreement with Consolidated Rail Corporation (Conrail) which permits through train movements between Montreal and Selkirk, New York. This is CN's second run-through agreement with a U.S. railroad. In the fall of 1992, CN began run-throughs between Duluth, Minnesota and Chicago under a haulage agreement with Burlington Northern (BN).

CP Rail System

CP Rail, privately owned by Canadian Pacific Ltd., provides service in eight Canadian provinces. CP Rail's subsidiaries, the Soo Line and the Delaware & Hudson Railway (D&H), operate in the Great Lakes and mid-western states, and the eastern seaboard, respectively. In 1993, CP Rail operated almost 31,000 kilometres of track in Canada and the U.S.

A 1993 rail agreement between CP Rail and Conrail gave the D&H access to Conrail's on-dock rail facilities in Philadelphia. This provides the D&H with direct rail access to more than 75 shippers in Philadelphia and routing for Canadian containerized cargo through the port.

CP Rail and Guilford Transportation entered into a partnership aimed at improving intermodal rail access to the Midwest U.S. and Canada, while the opening of Guilford's Fort Devens intermodal terminal enables the two carriers to link Boston with the Midwest and Canada.

CP Rail acquired Alberta Intermodal Services (AIS), a company that the provincial government set up in 1986 in order to lower freight rates for Alberta businesses. AIS was a container shipping operation which employed 16 people and owned 100 truck trailers and two container terminals in Calgary and Edmonton.

Class II Railways

The regional railways are predominately resource-based and the economic success of these railways is tied to the financial health of their major shippers.

Provincially-owned BC Rail, Canada's third largest railway in terms of tonnage and employees, is a major north-south freight carrier. Forestry and mining products are the principal commodities moved by BC Rail.

BC Rail announced in March, 1993, that it was acquiring Vancouver Wharves Limited for \$15.8 million. Vancouver Wharves is a multi-product cargo terminal in North Vancouver that handles potash, sulphur and other bulk commodities for about 20 major customers in Western Canada.

In early 1993, the Ontario government informed Algoma Central Corporation that, in the absence of a concrete plan for restructuring the Algoma Central Railway (ACR), it was not prepared to continue subsidizing the railway's operations beyond June 30, 1993. ACR then negotiated a restructuring deal with Illinois-based Wisconsin Central Ltd. to purchase the railway operations. The ratification of a November, 1993 collective agreement by a large majority of the railway's workers in February, 1994, was a favourable step to Wisconsin Central's acquisition of the railway. The acquisition deal is subject to regulatory review by the Agency.

Rail Rationalization

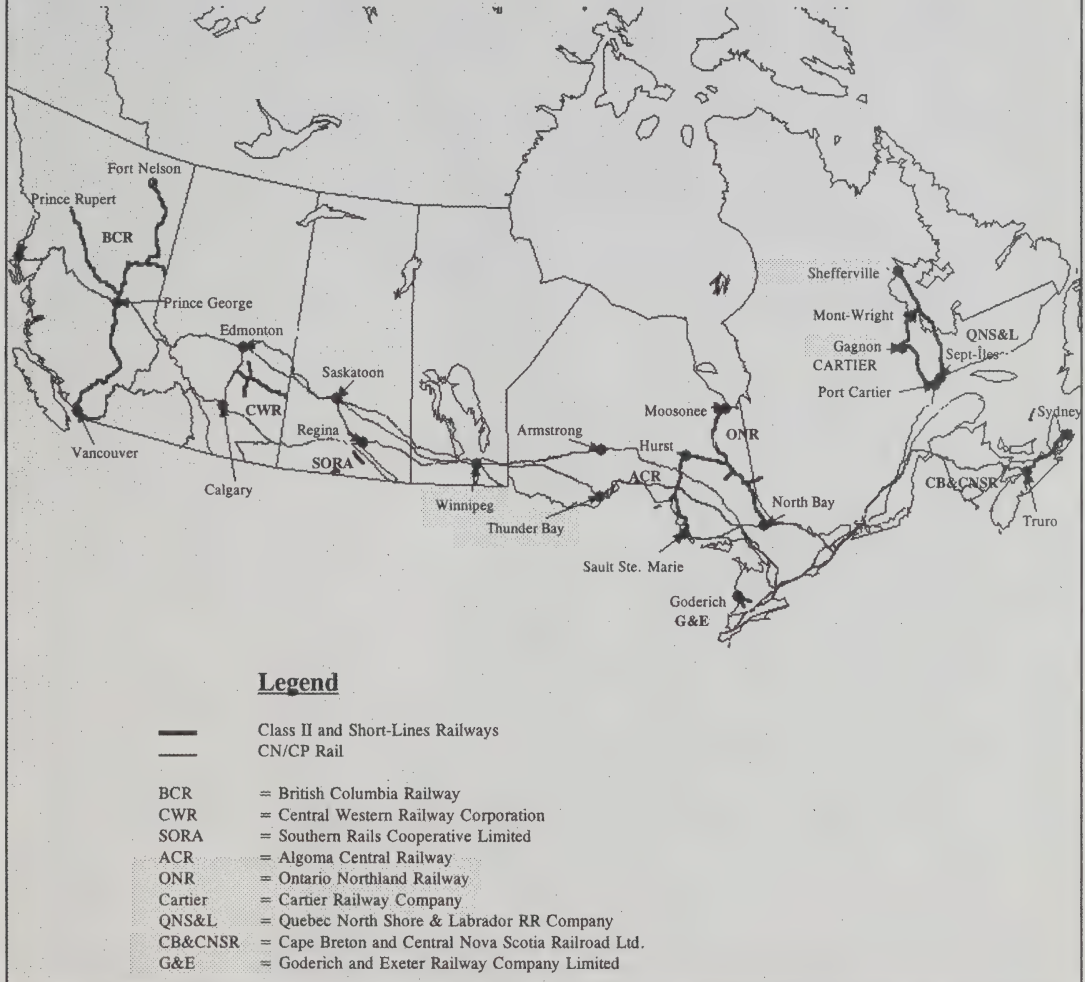
The *NTA, 1987* gives the Agency jurisdiction over rail rationalization including new rail line abandonment applications (or reconsiderations), track determinations and conveyance of railway lines, while its jurisdiction over station removals comes from the *Railway Act*.

Abandonment Activities

The four per cent rule limiting the amount of trackage railways could abandon each year was removed effective January 1, 1993.

Between 1988 and 1992, the *NTA, 1987* limited the amount of trackage that the railways could abandon in any given year to four per cent of their total system mileage. In 1989, the Agency permitted CN to abandon four per cent of its network. This was the only year either railway reached the four per cent abandonment ceiling. Since January 1, 1993, the limit no longer applies.

In 1993, the Agency rendered decisions on 645.5 route kilometres of CN's network, of which 98 kilometres were previously protected by Order in Council. The Agency ordered the abandonment of 625.4 kilometres, of which 435.7 kilometres were abandoned in 1993 and 189.6 kilometres will be abandoned in 1994. The Agency also ordered the continuance of 9.7 kilometres, while one application totalling 10.5 kilometres was dismissed.

FIGURE 4.4: Class II Railways

The Governor in Council extended the abandonment date of a 147 kilometres segment of the Chapais Subdivision in Quebec until May 31, 1994 and rescinded a 1991 Agency abandonment decision pertaining to a portion of CN's Montmagny subdivision.

As a result of an Agency decision in late 1992, 1.6 kilometres of CP Rail trackage was abandoned in early 1993. The Agency also issued decisions in 1993 on applications by CP Rail to abandon 853.1

kilometres of track. An application to abandon 12.6 kilometres was dismissed while 840.6 route kilometres were authorized to be abandoned, including 178.6 kilometres of trackage in 1993; a further 311.7 route kilometres will be abandoned in 1994. The Agency also ordered the abandonment of 350.3 kilometres of CP Rail trackage between Sherbrooke, Quebec and Saint John, New Brunswick, to occur in August, 1994; the abandonment date was subsequently changed to January 1, 1995 by the Governor in Council.

TABLE 4.2
Branch Line Abandonments (kilometres)

	Trackage Abandoned 1988—1993				Ordered Abandoned in 1994 or later		
	CN	CP	CN/CP	Other	CN	CP	Other
Nfld.	88.4	—	—	—	—	—	—
P.E.I.	378.2	—	—	—	—	—	—
N.S.	170.5	242.2	—	—	—	—	—
N.B.	367.6	806.6	—	—	—	213.3	—
Quebec	698.5	479.0	—	—	39.3	137.1	—
Ontario	716.3	489.5	—	63.5	3.4	282.0	—
Manitoba	289.6	94.3	—	—	—	—	—
Sask.	359.1	405.4	—	—	—	29.8	—
Alberta	189.6	201.3	14.2	—	—	—	—
B.C.	55.6	506.2	—	—	—	—	—
N.W.T.	87.4	—	—	—	—	—	—
TOTAL	3,400.8	3,224.5	14.2	63.5	42.7	662.2	—

One CSX Transportation Inc. application was decided by the Agency, allowing the abandonment of 9.8 kilometres of its Canadian rail network.

The number of track kilometres of branch line abandonment by province is illustrated in Table 4.2, indicating the extent of rationalization of the Canadian rail network since deregulation in 1988.

More detailed abandonment figures are reported in Appendices C.1 to C.5.

Conveyances

As the Class I railways move to reduce the non-profitable parts of their networks, they are attempting to convey under-utilized lines to short-line

*Conveyance of uneconomic
Class I railway lines to short
line operators continued;
labour succession legislation
jeopardizes the practice in
Ontario and British
Columbia.*

operators who, because of lower operating costs, can often maintain service on marginally economic lines. According to CN's rationalization plan, the railway plans to sell, share or abandon one-half of its 14,400 kilometre rail network east of Winnipeg by 1995.

In February, 1993, the Agency approved CN's application to convey parts of its St. Clair Tunnel subdivision to its wholly-owned subsidiary, the St. Clair Tunnel Company.

Newly-formed Cape Breton and Central Nova Scotia Railway Limited, a subsidiary of U.S.-based short-line operator RailTex, took over CN's 400 kilometre Truro-Sydney line in the fall of 1993. This was RailTex's second venture into short-line operations in Canada. However, RailTex has notified CN that it is no longer interested in acquiring any more surplus lines in southern Ontario because of recent amendments to provincial labour laws, which require the purchasing railway company to assume existing CN and CP Rail labour contracts. Similar legislation exists in British Columbia.

A 1992 application by CN to convey its Newton, Ontario subdivision (Stratford to Palmerston) to Victoria County Railway (VCR) is still before the Agency. In June, 1993, VCR and CN requested an extension to September 30, 1994 to conclude an Offer to Purchase.

CN has indicated it would also like to convey most of its 1,900 kilometre rail network in Quebec outside the main Montreal-Quebec corridor to short-line operators. In October, 1993, an agreement was reached for the sale of (subject to Agency's approval) a stretch of rail line between the Quebec suburb of Limoilou and Clermont, known as the Murray Bay subdivision. This transaction, which is subject to Agency approval, would result in the creation of Quebec Railway Corp, and would be the first sale of track in Quebec by CN to a private short-line operator. A notice of Agreement was received by the Agency in March, 1994.

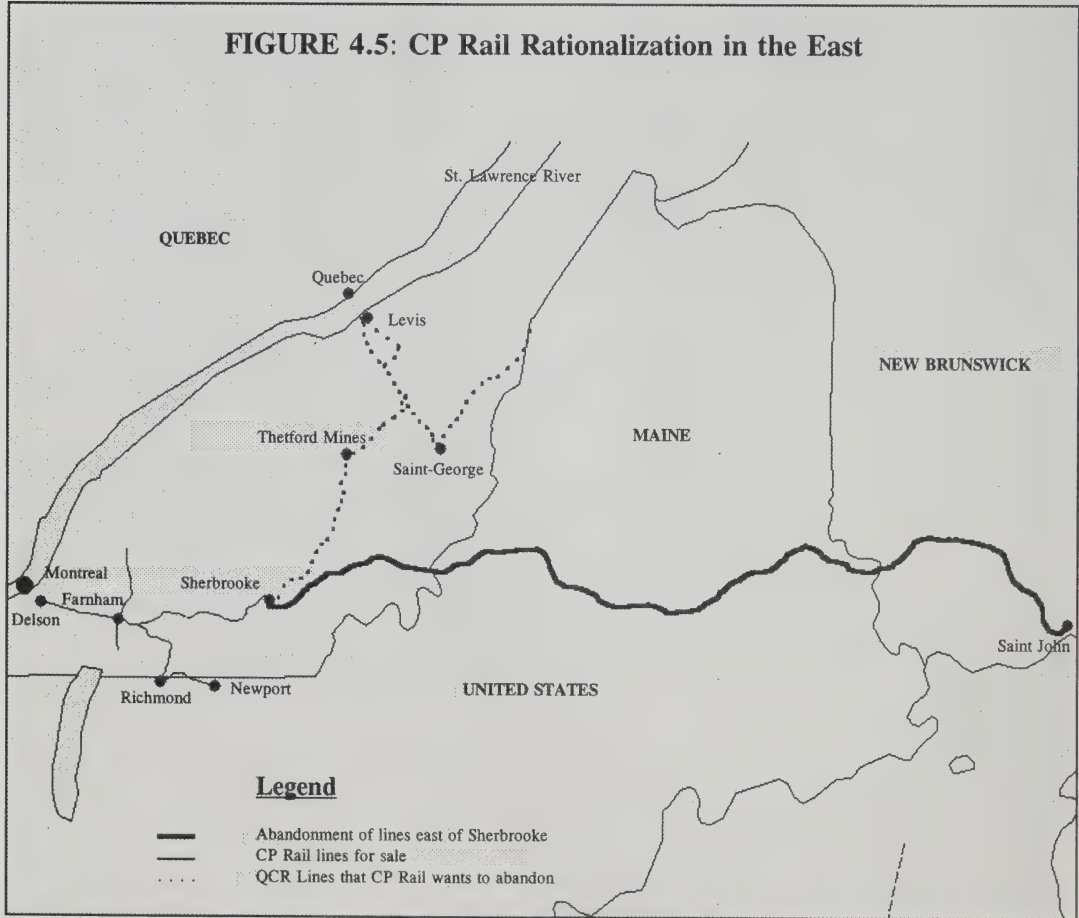
In October, 1993, CN announced its intention to sell its American subsidiary, Central Vermont Railway, a 522.9 kilometres line that links Montreal and New London, Connecticut.

In December, 1993, the Agency approved CN's application to transfer 0.2 kilometres of its Stettler subdivision in Alberta, including the track and lands comprising the "Viewpoint Ballast Pit Spur", to the Central Western Railway Corporation. At year end, CN's 1993 application to transfer the Weyburn/Bengough subdivision in Saskatchewan to CP Rail, along with the 1993 application to transfer the Meadow Lake, Sask. subdivision from CP Rail to CN were still pending before the Agency.

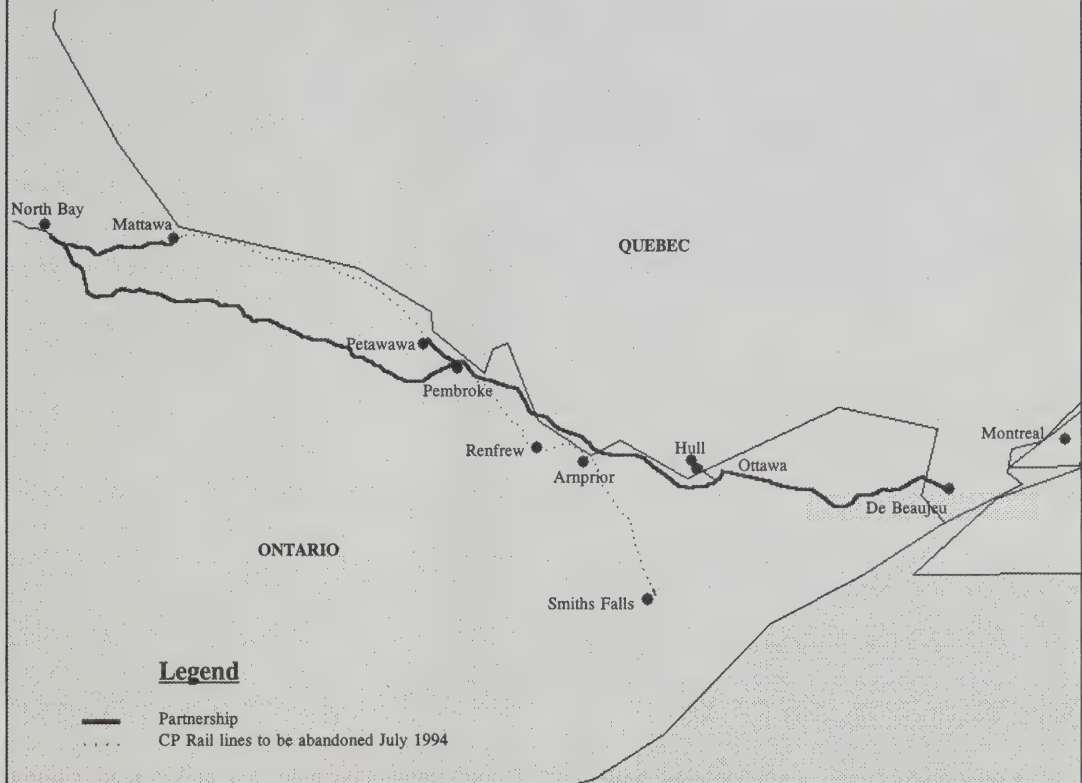
Following months of negotiations with Delaware-based Iron Road Railways Inc., CP Rail reached an agreement in 1993 to sell, subject to Agency's approval, the operating assets of the Dominion Atlantic Railway in Nova Scotia to a group of U.S. and Atlantic Provinces

investors who will operate under the name Windsor & Hantsport. In February, 1994, CP Rail filed an application with the Agency seeking approval of the sale. Windsor and Hantsport will take responsibility for 85.3 kilometres of track between New Minas and Windsor Junction, as well as eight locomotives and 76 railcars. The principal commodity handled on this line is gypsum from local mines for export to the United States.

FIGURE 4.5: CP Rail Rationalization in the East



As previously mentioned, CP Rail was authorized by the Agency in 1993 to abandon its trackage between Sherbrooke, Quebec and Saint John, New Brunswick. In April, 1994, CP Rail announced that Massachusetts-based Guilford Transportation Industries and Delaware-based Cantrack had been selected as potential operators of all or part of this trackage. CP Rail is expected to announce its final decision in late May.

FIGURE 4.6: CN/CP Ottawa Valley Partnership

Abandonment proceedings before the U.S. Interstate Commerce Commission (ICC) concerning CP Rail trackage in the state of Maine were also held in 1993. In February, 1994, a decision on the application was still pending when the ICC ordered an environmental impact study.

In November, 1993, CP Rail announced that it was seeking offers for its network of feeder lines between Delson and Sherbrooke, Quebec and Newport, Vermont. It believes that traffic on these 305 kilometres of feeder lines is sufficient to support short-line rail carrier. Any agreement would be subject to both Agency and ICC approval. Agency's approval would be required if the agreement precedes the fixed date of abandonment. CP Rail also advised the Agency of its intention to seek authority to discontinue rail operations on 382 kilometres of rail lines that stretch north from Sherbrooke through the Beauce region of Quebec. Abandonment/conveyance of these 687 kilometres of track would leave

CP Rail with its line east of Montreal, namely its track along the North Shore of the St. Lawrence River between Montreal and Quebec.

In March, the Agency approved CP Rail's application to convey the remaining three miles of its Boundary division in Grand Forks, British Columbia to the Grand Forks Railway Company.

CN and CP Rail entered into a partnership to counter the high costs of maintaining under utilized lines in the Ottawa Valley.

To counter the high costs of maintaining under-utilized lines, CN and CP Rail notified the Agency in June, 1993 of their intention to form the CN/CP Ottawa Valley partnership. The partnership permits the two railways to operate competing freight services over a shared single rail line in the 483-kilometres Ottawa Valley corridor between De Beaujeu, Quebec, about 65 kilometres west of Montreal, and North Bay, Ontario. The partnership agreement identifies the existing CN line as the more efficient route because it is flatter, passes through fewer populated areas and is 75 kilometres shorter than CP Rail's. Some CP Rail lines and the co-owned Ottawa Terminal Joint Facility Lines are also being conveyed to the partnership. The shared lines will be managed separately through the partnership. The Agency approved the CN/CP Ottawa Valley conveyance application in November, 1993.

Extra-Provincial Trucking

Since the introduction of economic regulatory reform in 1988, new extra-provincial trucking companies entered the market. While there were fewer bankruptcies in the trucking sector than in the previous years, a shake-out is still in progress with the cost conscious/specialty service or niche carriers the ones most likely to survive. Many companies have also acquired or formed alliances with U.S. trucking companies.

A representative sample of motor carrier senior officials was interviewed by Agency staff. These interviews revealed that large unionized carriers have had to face the biggest challenge in the restructuring of their operations. On the other hand, non unionized regional carriers have suffered significantly less from restructuring. They have benefitted from a more favourable environment which, due to their greater flexibility, has allowed them to adapt more easily.

Major Carriers

Rationalization within the trucking industry continued with the objective of achieving flexible operations to meet rapidly evolving market needs.

In March 1993, Canadian Pacific Express and Transport Ltd. (CP Express), Canadian Pacific's trucking company, sold CANPAR, its parcel delivery division. A year later Canadian Pacific announced that it had sold Highland Transport, its truckload (TL) and container division. Both divisions were bought by Westminster Holdings Inc. In April 1994, Canadian Pacific Ltd. announced that it had an agreement in principle to sell CP Express, its less-than-truckload (LTL) carrier to a management-led employee group. If the deal is ratified by CP Express'

unionized employees, Canadian Pacific will withdraw entirely from the trucking business. Canadian Pacific had previously announced that it wanted to shed its trucking operations, which have accumulated losses of over \$170 million since 1990, and concentrate on its other businesses.

Trimac Transportation bought Pacific Trucking of Seattle, a for-hire carrier principally involved in the transport of petroleum products in the states of Washington and Oregon. It then amalgamated Pacific Trucking's business with its existing operations in Washington State, creating a business unit specializing exclusively in hauling petroleum products. Trimac Transportation also purchased the chemical hauling interests of Queensway Tank Lines of Montreal.

Reimer Express Enterprises Ltd. sold Mississauga-based Inter-City Truck Lines' LTL Ontario and Quebec operations to a division of TNT Canada Inc. Inter-City's remaining transborder and truckload operations were shut down.

Motorways, owned by Federal Industries, merged with Kingsway Transport in 1992 and was for sale in 1993. In December, 1993, reduced traffic volumes, depressed rates and high operating costs forced Federal Industries to close Motorways' LTL trucking operations. Several western Canadian-based general freight trucking companies expanded their operations by buying some of Motorways' equipment and terminals.

TABLE 4.3

Canadian Trucking Firms Interviewed having Acquired an Interest in or Control of Another Canadian Trucking Firm

	1990	1991	1993
Number of firms	15	12	12
As a proportion of sample	11.9%	11.4%	11.8%

Of the trucking firms interviewed for the 1993 Annual Review, 12 companies reported that they had acquired an interest in or control of another Canadian trucking firm. These acquisitions were made mostly by firms who operated over 200 tractors. Canadian trucking firms interviewed by the Agency, did not acquire U.S. trucking companies in 1993.

Each year, the journal, *Today's Trucking*, ranks the top trucking firms in Canada based on fleet size — a proxy for company size. During the period 1988 to 1993, the ranking of Canadian trucking firms has changed significantly. Thirty-seven of the top 100 trucking companies in 1988 were not included in the list in 1993; they have either closed down their operations, merged with another company or declared bankruptcy. Ten

FIGURE 4.7
Number of Total Vehicles
in the Fleet of Top Forty Canadian Trucking Firms

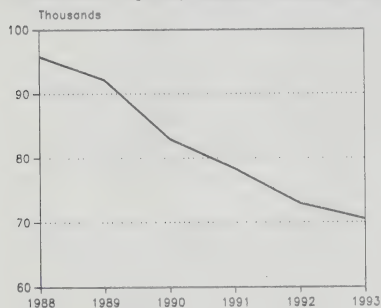


FIGURE 4.8
Number of Owner-Operators used
by the Top Forty Canadian Trucking Firms

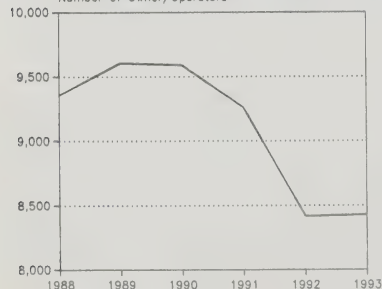


TABLE 4.4
Top Forty Canadian Trucking Firms - 1993

Company	Rank 1993	Rank 1988	Total Vehicles in 1993
CP Trucks Group	1	2	4,532
TNT Canada	2	3	3,681
Trimac Transportation System	3	11	3,244
SLH Transport	4	15	3,060
CP Express & Transport (CP)	5	6	2,832
Robert Transport Group	6	17	2,740
Paul's Hauling	7	19	2,698
Cabano Transport	8	7	2,596
Federal Industries Transport Group	9	1	2,213
Reimer Express Enterprises	10	8	2,186*
TNT Overland Express (TNT)	11	9	2,178
Auto Haulaway	12	30	1,850
Kleysen Transport	13	26	1,840
Arnold Bros. Transport	14	22	1,712
Day & Ross Transportation Group	15	13	1,706
Highland Transport (CP)	16	21	1,700
Frederick Transport	17	20	1,672
Laidlaw Carriers	18	16	1,656
Midland Transport	19	33	1,500
Les Transports Provost	20	10	1,475
Wilson's Truck Lines	21	37	1,450
Reimer Express Lines (Reimer)	22	25	1,445
Byers Transportation Systems Inc.	23	48	1,420
Tri-Line Expressways (Federal)	24	32	1,380
Westcan Bulk Transport (Paul's)	25	27	1,376
Brookville Transport	26	not in top 100	1,335
Armour Transport Systems	27	42	1,315
Trans-X	28	81	1,200
Canadian Freightways	29	29	1,187
Kindersley Transport	30	44	1,186
Challenger Motor Freight	31	78	1,133
Manitoulin Transport Group	32	53	1,092
Groupe Papineau	33	50	1,067
Canada Cartage System	34	23	1,050
XTL Transport	35	28	1,038
Hendrie Transportation System	36	74	983
Thibodeau Transport Group	37	not in top 100	981
Hunterline Trucking	38	70	967
Sunbury Transport	39	46	925
Atomic Transportation	40	45	920

* Estimated

of the top 40 firms in 1988 were no longer on the list by 1993. Two carriers dropped off the list between 1988 and 1992, then reappeared in 1993. Three additional carriers, still in business in 1993, fell to a ranking below 40. Between 1989 and 1993, 18 carriers made it to the Top 40 list for the first time: three in 1989, four in 1990, six in 1991, four in 1992, and one in 1993. By 1993, four of these 18 carriers had left the market and one was no longer one of the top 40 carriers.

In 1993, the Top 40 carriers used 26 per cent fewer vehicles than the top carriers in 1988 (Figure 4.7). This suggests that the top trucking firms in Canada today have not only rationalized their fleets, but are making better and more efficient use of them. After decreasing for three years, the use of owner-operators by the Top 40 Canadian trucking firms increased slightly in 1993. (Figure 4.8) This is another indicator of the extent of rationalization that has occurred within the industry.

Alliances Formed by Trucking Firms

In 1993, several alliances or partnerships were formed.

Midland Transport formed a marketing partnership with TNT Red Star Express of Newark, New Jersey, to provide next day service between the Northeastern U.S. States and major points in the Maritime provinces, with fourth day service to Newfoundland.

FEE Transportation and Erb Transport established an alliance that will provide LTL movements of perishables between locations in central and eastern Canada and the U.S.

Overland Freight and Courier of B.C. and McGilvray Transport System have entered into an agreement designed to help both companies provide general freight, LTL, TL, and reefer services to southern B.C., Vancouver Island, Alberta and Saskatchewan.

Cabano established three alliances that allow it to offer service across North America. One alliance is with Old Dominion Freight Line which serves the southeastern states. The second is with Churchill Truck Lines which provides service to the central states. Cabano, which had an alliance with Motorways to serve western Canada, entered into an arrangement with Consolidated Fastfrate to provide service to western Canada when Motorways ceased operations in 1993.

Day & Ross struck a partnership agreement with Plymouth Rock Transportation of Stoneham, Massachusetts to increase its share of the north-south traffic between New England and the Atlantic states, and the Maritimes, Quebec and Ontario.

Trimac Transportation System, the largest bulk carrier in North America, signed an agreement with Transportes Norti-Mex, an associated Mexican trucking company of Mexico City. The agreement covers the interchange of equipment along the U.S./Mexico border. It places both companies in a good position to benefit from increased trade in bulk commodities between the three North American countries. This agreement provides Trimac with access to Mexican markets of interest to some of its major shippers. Trimac is following in the steps of several U.S. companies that have either opened terminals in Mexico or signed deals with Mexican carriers in anticipation of increased cross-border traffic under NAFTA.

Under a new alliance with Mexico's FNM Railroad, Chemical Leaman Tank Lines Inc. of Exton, Pennsylvania, is the first bulk carrier to offer container-on-flat-car intermodal service from Canada and the United States directly into Mexico City. The through-rail arrangement allows shippers to avoid border crossing delays and Mexico's underdeveloped highway system.

Alliances with other trucking firms are used to improve service and to penetrate new markets.

Alliances

Alliances between Canadian and U.S. trucking firms are becoming more prevalent in the industry. In an environment that is becoming more and more competitive, the formation of alliances is one of the approaches adopted by companies to differentiate themselves from their competitors, to establish a regional presence in new markets, and to meet customers' demands for improved North American service. As a result, fewer companies serve all of the Canadian domestic market.

In the Agency's Motor Carrier Interview Program, 45 per cent of respondents indicated being involved in partnerships, commercial agreements, or strategic alliances with other carriers. Fifty-two per cent indicated they were also involved in interline agreements.

Private Carriers

Utilization by shippers of owned or leased equipment is down from 1988 levels.

Information collected from the Agency's 1993 Shipper's Survey indicated that 33 per cent of the respondents reported using their own or leased transportation equipment for shipping all or part of their truck traffic in 1993, compared with 48 per cent in 1988.

TABLE 4.5
Changes in Shippers' Owned-Leased Truck Fleet

	1988	1989	1990	1991	1993
<i>Percentage of responding shippers</i>					
Increase	21	20	16	14	17
Same	75	74	71	74	73
Decrease	4	6	13	12	10

FIGURE 4.9
Shipper's Degree of Reliance on their Private Fleet

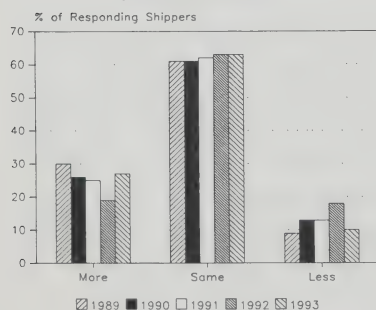


Table 4.5 shows the changes that shippers have made to their fleets of owned and leased vehicles. Almost three-quarters (73 per cent) of the shippers who maintain their own fleet of trucks indicated that their fleet had not changed in 1993 from 1992. Another 17 per cent reported that their fleet had increased. This is down slightly from 1988 and 1989 but up from 1991. The remaining 10 per cent of the respondents indicated that the size of their fleet of trucks had decreased; this is down slightly from 1990 and 1991.

Figure 4.9 shows changes in the degree of reliance by shippers on their own fleet to look after their trucking needs for the period 1989-93. Based on the Agency's Shippers Survey, 63 per cent of shippers operating their own private fleet of trucks relied on their fleet as much in 1993 as in 1992. Twenty-seven per cent relied on their fleet more in 1993 than in 1992 while 10 per cent relied less. As seen in figure 4.9,

the percentage of shippers reporting changes to their degree of reliance placed on their fleet of trucks is relatively consistent over the five-year period.

In addition to hauling their own goods, private carriers might be involved in for-hire trucking activities, especially on backhaul movements. But to do so, shippers need proper licence authority for their fleets. According to the Agency's Shippers Survey, 37 per cent of the shippers who own or lease a private fleet obtained an extra-provincial licence in 1993. This compares to 23 per cent in 1989. In 1993, 41 per cent of the shippers reported using the services of a private carrier operating a for-hire service, compared to 56 per cent in 1989.

Over 60 per cent of the carriers interviewed indicated that they did not notice an increase in the for-hire trucking activities of private carriers. They believe that more and more shippers are staying away from owning their own fleet for economic reasons, preferring to use for-hire carriers to meet their trucking requirements.

Owner-Operators

Information gathered by the Agency during its Motor Carrier Interview Program showed that 82 per cent of the trucking firms interviewed either did not change or increased the use of owner-operators compared to 1992, while 18 per cent of the respondents used fewer. This is consistent with the data obtained by *Today's Trucking* where the number of owner-operators used by the top 40 carriers in 1993 had increased compared to 1992, after a decline in the previous three years. Figure 4.10 shows that the distance travelled by owner-operators has risen since 1991, as have the payments made to owner-operators.

Some carriers indicated that it is more cost effective to use owner-operators, since they are generally paid on a distance basis or they receive a percentage of what the company gets for a shipment. Carriers looking at ways to cut expenses and improve their financial results often decide to hire more qualified owner-operators. However, some collective agreements, in place within the industry, place a limit on the work that can be turned over to owner-operators.

Market Entry

In 1993, there were 5,580 applications for extra-provincial licences compared to 5,634 applications in 1992. This represents a decrease of one per cent from 1992 (Table 4.6).

More than a third of the applications were submitted by carriers based in the jurisdiction where the application was filed. Thirty-nine per cent were filed by Canadian carriers domiciled in other jurisdictions and 25 per cent came from U.S. carriers. While fewer applications were submitted to the Saskatchewan, Quebec, and British Columbia licensing

FIGURE 4.10
Payments and Distances Travelled
by Owner-Operators

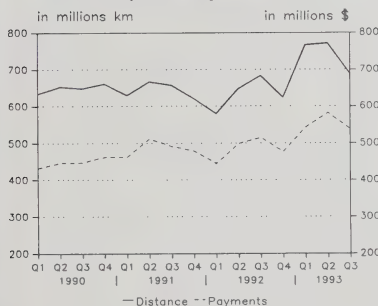


TABLE 4.6
Applications for Extra-Provincial Licence Authorities by
Jurisdiction and Domicile of Applicants: 1992-1993

Jurisdiction	Domicile of Applicants							
	Residents		Other Canadian Jurisdictions		U.S.		Total	
	1992	1993	1992	1993	1992	1993	1992	1993
Nfld.	8	8	38	48	4	6	50	62
P.E.I.	13	12	63	64	8	8	84	84
N.S.	22	119	81	145	31	29	134	293
N.B.	54	33	168	192	58	60	280	285
Quebec	662	704	370	353	546	432	1,578	1,489
Ontario	312	568	646	469	440	481	1,398	1,518
Manitoba	77	64	169	239	110	111	356	414
Sask.	260	105	239	191	83	67	582	363
Alberta	148	208	181	219	143	85	472	512
B.C.	180	150	302	231	180	127	662	508
Yukon	13	21	24	27	1	4	38	52
CANADA¹	1,749	1,992	2,281	2,178	1,604	1,410	5,634	5,580

¹ Excludes the N.W.T.

authorities, increases of less than 10 per cent were noted in Ontario and Alberta while Newfoundland, Manitoba, and Yukon reported larger increases. The number of extra-provincial licence applications in Nova Scotia more than doubled in 1993. This increased activity was due to a change in provincial legislation, where applicants now receive both intra- and extra-provincial authority, and to a decrease in licensing fees from \$250 per vehicle to \$10. The vast majority of applications were submitted by carriers who possessed either an intra or extra-provincial licence and who were applying for the other authority. In Prince Edward Island, the number of applications for licence authorities remained unchanged from 1992. Overall, 99 per cent of all extra-provincial applications filed in 1993 were approved; less than one per cent was still pending at the end of the year.

Table 4.7 shows the total number of applications reported yearly by the provincial boards between 1989 and 1993. The number of applications in 1993 was significantly lower than in 1989. Since 1989, the number of applications has decreased every year. This downward trend is the result of fewer applications by residents, by carriers based in other jurisdictions and by U.S. carriers (Figure 4.11).

FIGURE 4.11
Total Number of *MVTA* Applications

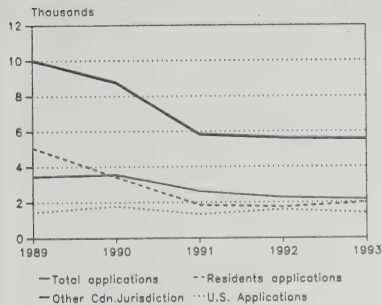


TABLE 4.7
An Historical Overview of the Number of Applications for
Licence Authorities

	1989	1990	1991	1992	1993
Nfld.	127	110	67	50	62
P.E.I.	131	133	102	84	84
N.S.	277	283	240	134	293
N.B.	453	395	323	280	285
Quebec	3,379	1,645	1,453	1,578	1,489
Ontario	2,854	3,447	1,478	1,398	1,518
Manitoba	392	470	356	356	414
Sask.	632	748	543	582	363
Alberta	749	632	513	472	512
B.C.	965	857	739	662	508
Yukon	67	61	38	38	52
Total	10,026	8,781	5,852	5,634	5,580

The Agency's Motor Carrier Interview Program has also confirmed this downward trend in licensing activities. Just over 10 per cent of the sampled carriers indicated that they applied for extra-provincial licences in 1993 compared to 80 per cent in 1988. This reflects the fact that, by 1993, the majority of carriers already possessed the necessary licences for their operations.

Figure 4.12 shows the estimated number of carriers domiciled in each province as well as the number of carriers operating in each province (includes domiciled carriers and other carriers based/domiciled in other provinces). Ontario and Quebec have the highest numbers of carriers, followed by British Columbia and Alberta.

FIGURE 4.12: Estimated Number of Trucking Companies Domiciled and Operating in Each Province; 3rd. Qtr., 1993



Market Entry by U.S. Carriers

Licence applications by U.S.-based trucking firms decreased in 1993.

As shown in Table 4.6, the number of applications for extra-provincial operating authorities by U.S.-based carriers decreased in 1993. While Manitoba reported virtually no change in the number of applications filed by U.S. carriers, the remaining western provinces and Quebec each noted significant decreases. The province of Ontario noted an increase of nine per cent. The remaining provinces and Yukon all reported very little change in the number of U.S.-based carriers applying for authority in Canada.

The number of operating authorities in Canada held by U.S.-based carriers at the end of 1993 was 7,142. (Table 4.8) This represents an increase of 12 per cent over 1992. The province that reported the largest number of licences held by U.S.-based carriers is Ontario, totalling

2,799 in 1993. With the exception of Saskatchewan, all provinces reported an increase in 1993.

TABLE 4.8
Operating Authorities in Canada Held by U.S. Carriers

	1991	1992	1993
Nfld.	27	33	38
P.E.I.	35	40	45
N.S.	111	134	144
N.B.	196	229	277
Quebec	877	1,126	1,269
Ontario	2,066	2,506	2,799
Manitoba	457	533	645
Sask.	341	404	400
Alberta	559	624	728
B.C.	632	734	775
Yukon	22	14	22
TOTAL*	5,323	6,377	7,142

Note: Excludes N.W.T.

Some of the senior motor carrier officials interviewed in 1993 felt that their company was facing increased competition from U.S.-based carriers.

Market Exit

In 1993, there were 499 bankruptcies reported in the trucking industry, a decrease of 22 per cent over 1992 (Figure 4.13). Further information on bankruptcies is provided in Appendix D.1. Manitoba, Prince Edward Island and Newfoundland were the only provinces to register more bankruptcies in 1993 than in 1992. A reduction in the number of bankruptcies reported was also observed for the economy as a whole.

It should be noted that the "trucking" designation used in the classification of the firm can encompass a broad range of activities including some cases where the "trucking" component may be secondary to other operations, as in construction, farming or landscaping. The Agency was unable to obtain a list of trucking businesses that went bankrupt in 1993 due to administrative changes at the Office of the Superintendent of Bankruptcy. Consequently the Agency could not verify with provincial authorities how many bankrupt trucking businesses had an extra-provincial licence.

FIGURE 4.13

Bankruptcies Reported in Canada by Industry

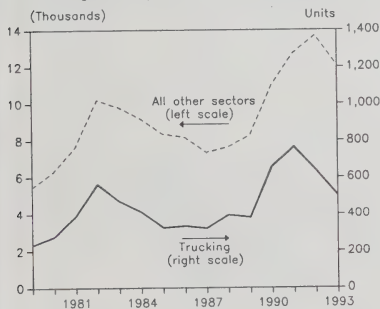


FIGURE 4.14

Trucking Bankruptcies by Region
1987 - 1993

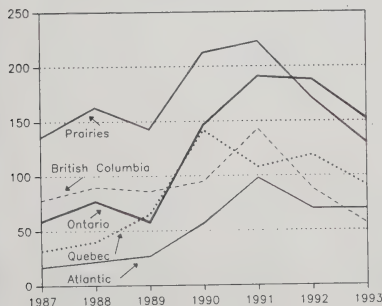
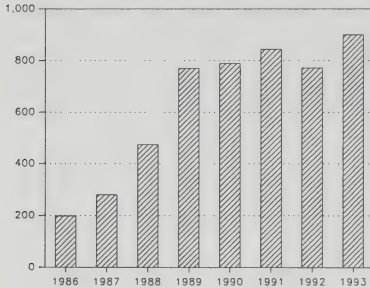


FIGURE 4.15

ICC Applications by Canadian Carriers
Number of Applications



Canadian marine traffic moves on ocean trade routes, the Great Lakes/St. Lawrence River, coastal waters and on northern resupply routes.

The Shipping Federation of Canada, with a membership of 85 companies, represents the owners, operators, charterers and agents of vessels (both bulk and general cargo) engaged in Canada's overseas commerce. This incorporates 95 per cent of ocean vessels operating to and from ports in Atlantic Canada, the St. Lawrence River, and the Great Lakes and covers virtually all of the trade moving between eastern Canada and ports overseas.

ICC Applications by Canadian Carriers

In 1993, Canadian trucking companies filed 900 applications with the ICC for authority to provide inter-state trucking services in the United States. This represents an increase of 17 per cent over 1992. The 1993 number is approximately 4.5 times as large as the number of applications made in 1986 by Canadian trucking firms. The continued increase in the number of applications by Canadian trucking firms for ICC licences is indicative of the shift in traffic patterns that is occurring and the need for Canadian trucking companies to establish U.S. bases. Such a move would allow them to not only be in position to better serve U.S. markets, but to be ready to take advantage of future opportunities flowing from increased trade with Mexico under NAFTA. Also, certain Canadian carriers report that U.S. trucking companies are too busy with growing U.S. traffic to concentrate on expanding their transborder operations. Hence, Canadian trucking firms are finding increased opportunities in an expanding north-south traffic flow.

Based on the Agency's Motor Carrier Interview Program, the number of Canadian carriers that have established a base of operations in the United States has almost tripled between 1990 and 1993.

Marine

Canada relied on marine transportation for the movement of 52 million tonnes of domestic shipments and over 224 million tonnes of international trade in 1992. In the absence of any significant Canadian-domiciled international merchant fleet, Canadian shippers rely, for the most part, on foreign-based carriers for these services.

The variations in commodities carried, cargo handling requirements, types of ships, port facilities, and transportation needs of shippers have led to the development of a complex and diverse array of marine services for non-bulk shipping. Many vessels were built to handle various types of general cargo, but since the mid-seventies, they have been adapted to carry increasingly popular containerized shipments. Some vessels handle containers exclusively, while others are specialized for shipment of non-bulk commodities such as fresh fruit, automobiles, or forest products. Some remain equipped to handle general cargo. Liner services incorporate all of these vessel-types, operating on regular schedules with fixed itineraries.

Liner services, carrying containerized, break-bulk and general cargo, are the "common carriers" in international marine transportation. Bulk cargoes such as grain, iron ore and coal tend to move on non-liner tramp or spot-chartered vessels contracted by the shipper. These vessels are not considered common carriers. Other vessels are operated in private fleets by companies transporting industrial inputs to their processing plants or delivering finished products to markets. Oil companies, auto

manufacturers, forest products operations, and mineral processors are examples of companies that use private fleets.

The Liner Trade

Containerized Cargo

The international liner trade is dominated by large fleets of specialized containerships operating on major trade routes. The largest proportions of the world's fleet are controlled by Pacific Rim and Western European interests. (Figure 4.16)

FIGURE 4.16

Regional Distribution of
Top Twenty International Liner Companies' Fleets
September 1993

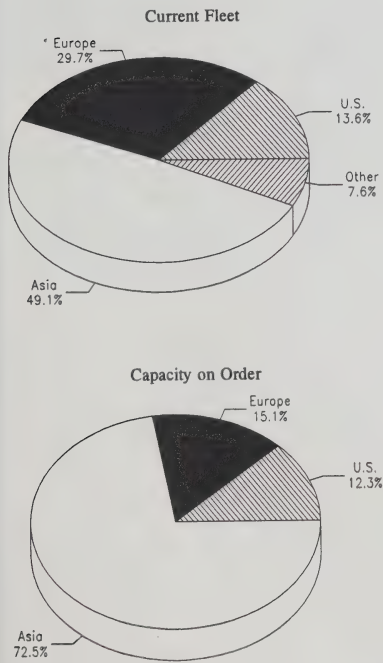


TABLE 4.9

Top Twenty International Liner Companies (1993)

Operator	Vessels	TEU Capacity
Maersk Line	92	174,088
Sea-Land Service	81	147,765
Evergreen Line/UMC	73	144,140
NYK Line/TSK Line	75	122,130
Mitsui OSK Lines	63	91,015
P&O Containers	41	80,984
K-Line	46	80,168
Hanjin Shipping Co.	33	77,398
Nedlloyd Lines	47	75,938
Zim Israel Navigation	53	71,397
American President Lines	39	69,527
Hapag-Lloyd	29	63,222
Neptune Orient Lines	34	59,208
Cosco Shanghai	58	58,576
Yangming Marine Transport	23	56,330
Orient Overseas Container Line	22	53,074
United Arab Shipping Co.	51	50,371
Mediterranean Shipping Co.	43	43,991
Hyundai Merchant Marine	12	40,359
DSR Lines	34	37,388
Top Twenty Total	949	1,597,069
World Total	5,199	3,663,749

Maersk Line's 1993 take over of the East Asiatic Company's liner interests made it the largest container carrier in the world. The liner industry is becoming increasingly concentrated, with the 20 largest operators now controlling almost 44 per cent of the total shipping capacity in 1993. Six years ago, this figure was less than 35 per cent.

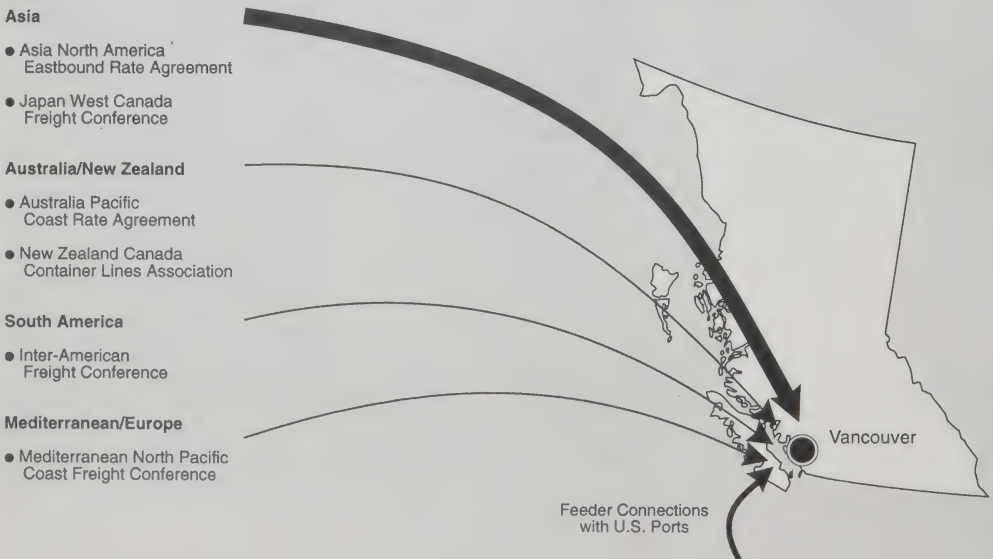
FIGURE 4.17: Outbound Conference Shipping**FIGURE 4.18: Inbound Conference Shipping**

TABLE 4.10
Shipping Conferences Serving Canada's West Coast

Conference	Scope of Operations	Member Lines	Ownership	Port of Call
Canada Westbound Rate Agreement Asia North America Eastbound Rate Agreement	Both conferences serve the Commonwealth of Independent States, Hong Kong, Indonesia, Korea, Malaysia, People's Republic of China, Philippines, Singapore, Taiwan, Thailand, Japan (CWRA only), and outports to Brunei, Kampuchea, Laos, Vietnam	American President Lines A.P. Moller Maersk "K" Line Mitsui - OSK Lines Neptune Orient Lines N.Y.K. Lines OOCL Sea-Land	U.S.A. Denmark Japan Japan Singapore Japan Hong Kong U.S.A.	U.S. ports Vancouver/U.S. ports Vancouver Vancouver Vancouver Vancouver Vancouver U.S. ports
Japan-West Canada Freight Conference	Japan	"K" Line Mitsui - OSK Lines Neptune Orient Lines N.Y.K. Lines OOCL Sea-Land	Japan Japan Singapore Japan Hong Kong U.S.A.	Vancouver Vancouver Vancouver Vancouver Vancouver U.S. ports
Pacific Coast/Australia-New Zealand Tariff Bureau	Australia, New Zealand	Australia New Zealand Direct Line Blue Star Line Columbus Line	France U.S.A./U.K. Germany	U.S. ports Vancouver U.S. ports
Australia-Pacific Coast Rate Agreement	Australia	Blue Star Line Columbus Line	U.S.A./U.K. Germany	Vancouver U.S. ports
New Zealand/Canada Container Lines Association Conference Agreement	New Zealand	Blue Star Line Columbus Line	U.S.A./U.K. Germany	Vancouver U.S. ports
Inter-American Freight Conference - Pacific Coast	Inbound/outbound conference serving Argentina, Brazil, Paraguay, Uruguay	CIAMAR E.L.M.A. Line Maruba S.C.A. Nedlloyd Line Norbel Line	Argentina Argentina Argentina Netherlands Belgium/Brazil	U.S. ports (inbound) Vancouver Vancouver U.S. ports Vancouver
West Coast/Middle East Canada Rate Agreement	Bahrain, Iran, Iraq, Oman, Saudi Arabia, United Arab Emirates, Yemen	American President Lines A.P. Moller Maersk Sea-Land	U.S.A. Denmark U.S.A.	U.S. ports Vancouver/U.S. ports U.S. ports
Mediterranean North Pacific Coast Freight Conference	Inbound/outbound conference serving ports in Mediterranean and Black Sea, Atlantic coast of Spain, Portugal, and Morocco	D'Amico Line Italia Line Splisna Plovba-Piran Zim Israel Navigation Co.	Italy Italy Slovenia Israel	Vancouver Vancouver Vancouver U.S. ports

TABLE 4.11
Independents Serving Canada's West Coast

Line Name	Ownership	Trade Routes	Line Name	Ownership	Trade Routes
COSCO	PRC	S.E. Asia, N.E. Asia	Wilhelmsen Lines	Norway	Oceania
Evergreen Line	Taiwan	S.E. Asia, N.E. Asia, Middle East	South Pacific Interline	n.a.	Oceania
FESCO	CIS	S.E. Asia, N.E. Asia, Subcontinent	IMTL Line	Australia	Oceania
Hoegh line	Norway	S.E. Asia, N.E. Asia, Europe	Nedlloyd Line	Netherlands	Oceania
Pacific Commerce Line	Canada	S.E. Asia, N.E. Asia	CVS Chilean/Granco JS	Chile	South America
Noram Ocean transport	n.a.	S.E. Asia, N.E. Asia	CCNI Line	Chile	South America
Hyundai Merchant Marine	Korea	S.E. Asia, N.E. Asia	Grancolumbiana Line	Colombia	South America
Westwood Shipping	U.S.A.	S.E. Asia, N.E. Asia, Europe	Navicana Line	Ecuador	Central/South America
CMB Belgian Line	Belgium	Europe	Naviera Lavinel	Venezuela	South America
Cascadia Line	Canada	Europe	Naviero Pacifico	Venezuela	South America
OOCL	Hong Kong	Europe	Pacific Meridian Line	U.S.A.	Central/South America
A.P. Moller Maersk	Denmark	Europe	Safbank Line	South Africa	Africa
Atlantic Container Line	U.S.A./U.K.	Europe	American President Lines	U.S.A.	Subcontinent
Hapag Lloyd	Germany	Europe	Mitsui-OSK Line	Japan	Subcontinent
Sea-Land Services	U.S.A.	Europe			

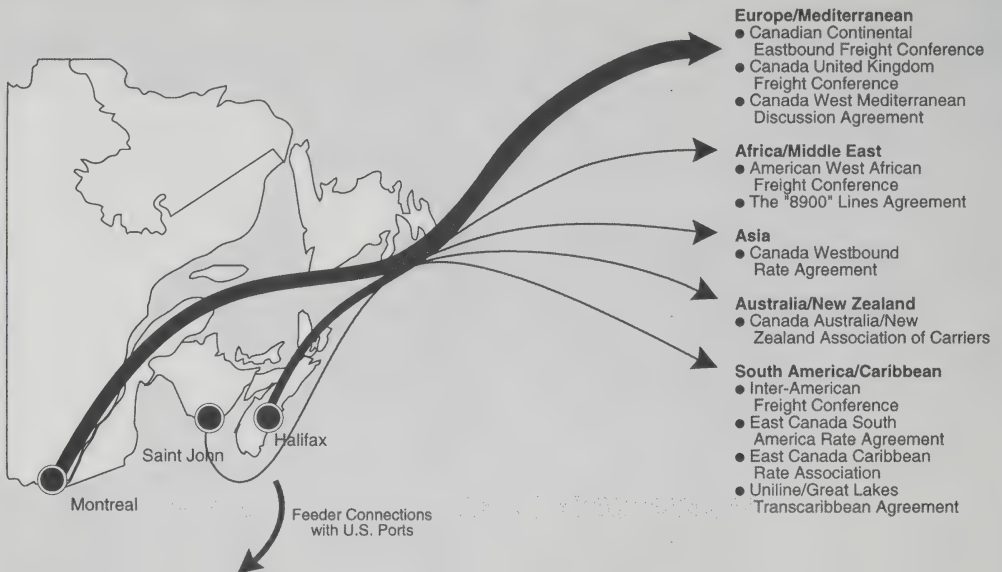
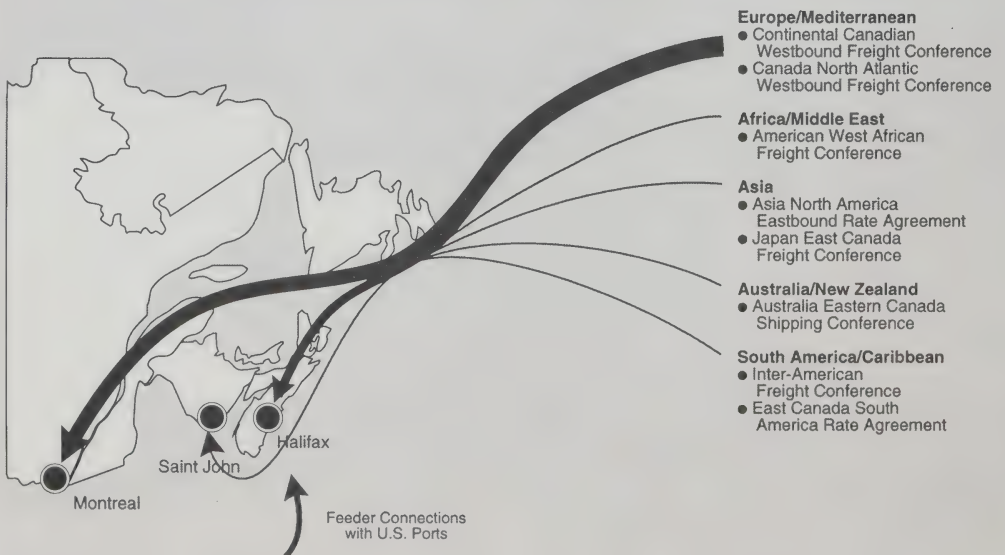
FIGURE 4.19: Outbound Conference Shipping**FIGURE 4.20: Inbound Conference Shipping**

TABLE 4.12 - Shipping Conferences Serving Canada's East Coast

Conference	Scope of Operations	Member Lines	Ownership	Port of Call
Canadian Continental Eastbound Freight Conference Continental Canadian Westbound Freight Conference	Both conferences serve Belgium, France, Germany, Netherlands	Atlantic Container Line Canada Maritime Cast Limited Hapag Lloyd OOCL Polish Ocean Lines	Sweden Canada Bermuda Germany Hong Kong Poland	Halifax Montreal Montreal Halifax Montreal Halifax
Canada-United Kingdom Freight Conference Canadian North Atlantic Westbound Freight Conference	Both conferences serve the United Kingdom	(Same as above)	(Same as above)	(Same as above)
Canada West Mediterranean Discussion Agreement	French Mediterranean, Spain, Italy	D'Amico Line Evergreen Italia Line Zim Israel Navigation	Italy Taiwan Italy Israel	U.S. ports U.S. ports U.S. ports Halifax
American West African Freight Conference	Inbound/outbound conference serving West African ports and interior points	America-Africa-Europe Line A.P. Moller Maersk Delmas Line Sitram Torm West Africa Line Westwind Africa Line Wilhemsen Line	Germany Denmark France Ivory Coast Denmark Greece Norway	U.S. ports Halifax U.S. ports U.S. ports U.S. ports U.S. ports U.S. ports
The "8900 Lines" Agreement	Middle East ports in Bahrain, Iraq, Iran, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates	A.P. Moller Maersk National Shipping Co. of Saudi Arabia Sea-Land United Arab Shipping Co. Waterman Steamship Co.	Denmark Saudi Arabia U.S.A. 6 Arab States U.S.A.	Halifax Halifax/Saint John Halifax/U.S. ports U.S. ports U.S. ports
Canada Westbound Rate Agreement Asia North America Eastbound Rate Agreement	Both conferences serve the Commonwealth of Independent States, Hong Kong, Indonesia, Korea, Malaysia, the People's Republic of China, the Philippines, Singapore, Taiwan, Thailand, Japan (CWRA only), and outports to Brunei, Kampuchea, Laos and Vietnam.	American President Lines A.P. Moller Maersk "K" Line Mitsui - OSK Lines Neptune Orient Lines N.Y.K. Lines OOCL Sea-Land	U.S.A. Denmark Japan Japan Singapore Japan Hong Kong U.S.A.	MLB / Vancouver Halifax U.S. ports U.S. ports Halifax Halifax MLB / Vancouver MLB / Long Beach
Japan-East Canada Freight Conference	Japan	"K" Line Mitsui-OSK Line Neptune Orient Line N.Y.K. Line	Japan Japan Singapore Japan	U.S. ports U.S. ports Halifax Halifax
Canada/Australia-New Zealand Association of Carriers	Australia, New Zealand	Blue Star Line Columbus Line Ocean Star Container Line Wilhemsen Line	U.S.A./U.K. Germany U.K. Norway	Halifax / U.S. ports Halifax / U.S. ports Halifax Halifax
Australia Eastern Canada Shipping Conference	Australia, New Zealand	Blue Star Line Columbus Line	U.S.A./U.K. Germany	Halifax / U.S. ports Halifax / U.S. ports
Inter-American Freight Conference - Atlantic Coast	Inbound/outbound conference serving Argentina, Brazil, Paraguay, Uruguay	A. Bottecchi S.A. E.L.M.A. Line Nelumar Line Alianca S.A.	Argentina Argentina Brazil Brazil	Halifax Saint John Montreal/Saint John U.S. ports (inbound)
East Canada South America Rate Agreement	Inbound/outbound conference serving Argentina, Brazil, Paraguay, Uruguay	Alianca S.A. American Transport Lines Columbus Lines Ivaren Lines	Brazil U.S.A. Germany Norway	U.S. ports U.S. ports Halifax / U.S. ports U.S. ports
East Canada Caribbean Rate Association	Barbados, Dominican Republic, Haiti, Jamaica, Trinidad, Leeward/Windward Islands	Navieras de Puerto Rico Sea-Land	Puerto Rico U.S.A.	U.S. ports Halifax / U.S. ports
Uniline/Great Lakes Transcaribbean Agreement	Caribbean Islands, Central America (East and West), South America West Coast, Colombia	Great Lakes Transcaribbean Line Uniline Naviera Universal S.A.	Canada Peru	Montreal U.S. ports

MLB = mini-landbridge

TABLE 4.13
Independents Serving Canada's East Coast

Line Name	Ownership	Trade Routes	Line Name	Ownership	Trade Routes
ABC Container Line	Belgium	S.E./N.E. Asia, Europe, Oceania	Sea-land Services	U.S.	Europe, Mediterranean
National Shipping Co. S.A.	Saudi Arabia	S.E. Asia, N.E. Asia	Troll Carriers	Norway	Europe
Hoegh Line	Norway	S.E./N.E. Asia, Europe, Mid-East	Japdroplov Line	Croatia	Europe, Mediterranean
Zim Israel Navigation Co.	Israel	S.E./N.E. Asia, Mid-East, Oceania, South/Central America, Caribbean	Lykes Lines	U.S.A.	Mediterranean, Central America, Caribbean, Africa
Pacific Commerce Line	Canada	S.E. Asia, N.E. Asia	Evergreen Line	Taiwan	Middle East
UM Shipping	n.a.	S.E. Asia, N.E. Asia, Europe	Turkish Cargo Lines	Turkey	Europe
Star Shipping	Norway	S.E. Asia, N.E. Asia, Mediterranean	Wilhelmsen Lines	Norway	Europe, Oceania
Shipping Corp. of India	India	Subcontinent	ANZDL	France	Oceania
A.P. Moller Maersk	Denmark	Europe, Mediterranean, S. America	Neptune Orient Lines	Singapore	Oceania
Arctic Steamships	C.I.S.	Europe	Grancolumbiana Line	Colombia	Central/South America
Balt Canada	C.I.S.	Europe	Saguenay Shipping	Canada	Central/South America, Caribbean
Beaver Express Line	Canada	Europe (one sailing)	Mambisas Cuflet Line	Cuba	Cuba
DSR/Metz Joint Service	Germany	Europe, Mediterranean, Mid-East	Melfi Line	Cuba	Cuba
FinnCarriers	Finland	Finland	Nelumar Line	Brazil	Caribbean/Central America
Greenland Lines	Greenland	Greenland	Safbank Line	South Africa	Africa
Holland/Canada Lines	Netherlands	Europe, South America	Barber West Africa	Norway	Africa
Kent Line	Canada	Europe, Mediterranean	Christensen Canadian	Norway	Africa
Ocean Star Shipping	U.K.	Europe, South America	African Lines		

Shipping Conference

A group of ocean carriers providing liner services on a common trade route who collectively agree on rates and/or conditions of service. The conference system emerged in the late 19th century as a means of controlling excessive competition among member lines, and thereby maintaining stability in rates and service levels. Conferences are currently shielded from competition laws by legislation such as Canada's *Shipping Conferences Exemption Act, 1987* and the U.S. *Shipping Act of 1984*.

Canadian-based operators include Canada Maritime, Fednav, Pacific Commerce Line, Kent Line, Saguenay Shipping, and Cascadia Container Line. Early in the year, CP Ships acquired full control of Canada Maritime by purchasing the 43 per cent minority holding of Belgium's CMB Transport. In October, 1993, the Danish carrier Hoegh Line purchased an 80 per cent stake in Pacific Commerce Line, which will retain its head office in Vancouver. The fledgling Beaver Express Container Line, operating out of Montreal, ceased operations after its first sailing in 1993.

One of the most prominent characteristics of the liner trade is the organization of many shipping companies into "conferences". Twenty-four tariff-filing conferences plus about 60 independent liner companies offered services to and from Canada in 1993, calling primarily at Montreal, Halifax, Saint John or Vancouver or handling cargo through U.S. ports via feeder connections to Canada. Fifteen of the conferences provided services to ports on Canada's east coast, six to ports on the west coast, and three conferences served both coasts. Except for Montreal, Canadian container ports tend to serve as extensions to the itineraries of carriers whose primary calls are at U.S. ports, and cargo loaded or unloaded at these Canadian ports represents only a small proportion of each vessel's capacity.

In the Canadian international liner trade, market share has been shifting steadily away from the conferences, with their total dropping to 35 per cent in 1992 while independent competitors carried 65 per cent. Conferences handle the largest proportion of import traffic while independents handle more exports. Over 85 per cent of conference

Co-operating agreements between former competitors are now commonplace on ocean-trade routes.

tonnage is containerized; independents' tonnage is about one-half containerized, with the balance being general and break-bulk cargo.

In recent years, chronic overcapacity in the liner trade, plus the added pressure of stagnant, recession-hit volumes on many trade routes, has led carriers to seek other ways to control capacity, rates and costs, and this, in turn, is reshaping the industry. Joint service, vessel-sharing and slot-chartering agreements are now prevalent on most trade routes, allowing for some rationalization of services and reduction of costs. These arrangements often extend further to include sharing of equipment and port facilities.

Oceanex, a company formed through the 1990 merger of Atlantic Container Express, Atlantic Sea Route Ltd and Newterm Ltd., offers domestic liner services on the east coast. Oceanex operates three container vessels in the Gulf of St. Lawrence, serving St. John's and Corner Brook, Newfoundland from Montreal and Halifax. Ferry services are provided by Marine Atlantic, a federal crown corporation whose operations connect all four Atlantic provinces and isolated communities along the coast of Labrador. There are no container vessels in domestic liner service on the west coast. Since the combination container/tanker owned by White Pass Transportation Ltd. ceased operation in August, containers have been handled by tug and barge.

Non-Containerized Cargo

Non-containerized general cargo still represents about 20 per cent of liner traffic.

In addition to cargo in containers, significant volumes of non-containerized cargo, comprising break-bulk goods, heavy machinery, wheeled goods, and forest products are handled at Canadian ports. These cargoes are usually carried by independent shipping lines, instead of conference carriers. Cargoes tend to be handled by specialized vessels or on combination roll-on/roll-off containerships. Most non-containerized general cargo is handled at Halifax, Montreal and Vancouver; however, some international shipping lines as well as Canadian lines such as Fednav and Canada Maritime transport these cargoes directly to Great Lakes ports, avoiding expensive overland carriage from coastal ports. On the west coast, paper and forest products exports, as well as logs and lumber, are carried by specialized vessels often operated by Canadian-based companies such as Pacific Commerce Line and Canadian Transport Company.

Non-Liner Services

Most Canadian bulk exports and imports are carried by foreign-flagged vessels operated by European and Asian companies.

Bulk Shipping

Canada exports large amounts of raw materials, agricultural and mining products through ports east and west coasts to markets throughout the world. Imports of bulk commodities are dominated by petroleum products which are unloaded mainly at east coast ports. Most Canadian bulk exports and imports are carried by foreign-flagged vessels operated

by companies in Europe and Asia. These vessels, mostly registered in countries such as Panama, Liberia or the Bahamas, are purpose-built to carry either liquid petroleum and chemical cargoes or dry bulk cargoes such as grain, iron ore and coal.

Dry bulk carriers and tankers are chartered privately and through exchanges in Europe and Asia. These exchanges enable shippers to either hire vessels from owners or contract with vessel operators via an open market. Vessels are either chartered for a particular voyage or engaged on a long-term contract of affreightment with the shipper. In either case, the vessels do not operate on schedules like liner services, but are employed only when a shipper needs to move a cargo.

TABLE 4.14
Foreign-Flagged Vessels Controlled by
Canadian Companies

Company	Vessels	Total dwt ¹
Fednav Limited	31	1,752,530
Cast North America	8	434,024
Canadian Transport Co.	6	233,325
Canada Steamship Lines	6	253,664
Abitibi Price	5	42,218
Irving Group	5	38,124
ULS International	4	202,338
Canadian Pacific	3	56,440
Alcan	3	139,885
Other Companies	27	499,354
Total	98	3,651,902

¹dead weight tonnes

Canadian shipping companies have some involvement in the foreign-flagged fleet; for instance, in 1991, 25 Canadian companies controlled a total of 98 vessels registered offshore.

Canadian shipping companies also operate foreign-flagged vessels in worldwide service.

Bulk vessels and tankers range in size from 15,000 to 250,000 dead weight tonnes (dwt) with the larger vessels used to carry iron ore and coal from ports on the lower St. Lawrence River and British Columbia. Smaller vessels, up to 35,000 dwt, carry bulk products to, from and within the Great Lakes. Specialized self-unloading bulk carriers dominate the Great Lakes trades and are operated by Canadian companies such as Canada Steamship Lines and Upper Lakes Shipping. They carry grain, coal, iron ore and potash within the Great Lakes and eastern seaboard. Canadian-owned bulk shipping companies currently operate world-wide, carrying dry cargoes such as ore, gypsum and coal on the east and west coasts of North America, as well as operating in Europe and Indonesia.

While large tankers, up to 150,000 dwt, are used to carry crude oil into Canada, most of the domestic trades employ smaller vessels under 20,000 dwt. They are used to carry refined petroleum products, gasoline, jet fuel, and chemicals to and from refineries on the Great Lakes and St. Lawrence Seaway. While all of the large tankers are foreign-flagged, the majority of smaller cargoes move on Canadian vessels operated by companies such as Soconav and Enerchem.

Barge operators on the west coast of Canada transport lumber and forest products to facilities in Vancouver and the United States for export to Europe and Asia.

General Cargo

Other general and break-bulk cargoes, which are not carried in containers or by liners, comprise a significant amount of tonnage, especially on the east coast and within the Great Lakes system. Products such as steel plate and coils, paper products, scrap and miscellaneous cargoes are carried by non-liner operators to consignees in Halifax, Montreal and Hamilton.

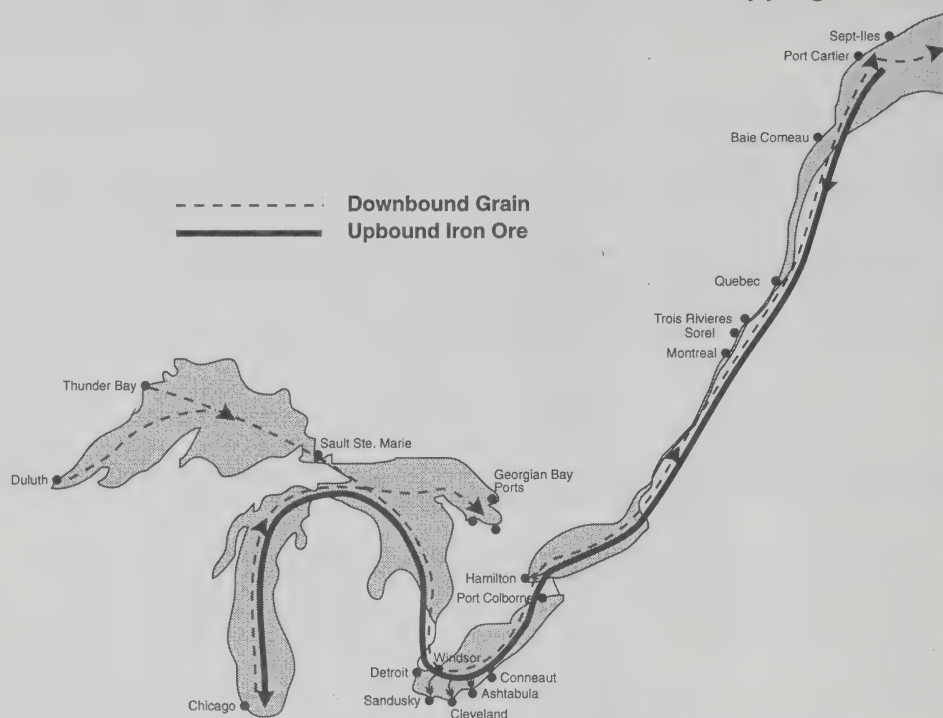
Great Lakes/St. Lawrence System

A unique component of the bulk shipping industry operates on the Great Lakes and the St. Lawrence Seaway. The St. Lawrence Seaway facilitates the movement of substantial volumes of domestic and transborder (United States) cargo as well as providing access to inland ports and industrial centres such as Hamilton, Cleveland, Chicago and Thunder Bay.

The commercial success of Canadian lake vessel operators has traditionally been based on the movement of grain from Thunder Bay through the Seaway system to lower St. Lawrence ports for transshipment to larger, deep-sea vessels, and on the integrated backhaul movements of iron ore from Sept-Îles to Canadian and U.S. steel mills on Lakes Ontario, Erie and Michigan.

Significant consolidation is occurring in shipping activities on the Great Lakes/St. Lawrence system.

The domestic and transborder U.S. trade is dominated by Canadian-flag "laker" vessels designed specifically to transit the Welland canal and St. Lawrence Seaway system. Two new companies have recently been formed to operate bulk carriers in the system. Seaway Bulk Carriers (1990) manages 16 vessels owned by Upper Lakes Shipping (ULS) and Algoma Central Corp. while Great Lakes Bulk Carriers (GLBC) controls 16 vessels belonging to Canadian Steamship Lines (CSL), Misener and Pioneer. Upper Lakes Shipping and Algoma Central Corp. are currently attempting to acquire GLBC and thereby achieve a market share of about 75 per cent of the gearless bulkler fleet. Another joint venture of ULS and Algoma Central Seaway Self-Unloading Bulk Carriers is scheduled to commence operations in the 1994 season with about two-thirds of the self-unloading bulkler fleet.

FIGURE 4.21: Great Lakes/St. Lawrence Shipping**TABLE 4.15****Canadian Shipowners' Association Fleets, 1993**

Company	Bulker	Self- Unloader	Tanker	Other	Foreign	Total
Algoma	6	11			1	18
CSL	1	11			3	15
Enerchem			4		1	5
Desgagnes	4			4		8
Logistec				1		1
Imperial			4	2		6
North West Co				1		1
GLBC	15				1	16
Paterson	7					7
P & H	3					3
Shell			1			1
Soconav			12			12
ULS	10	6				16
Oceanex				3		3
TOTAL	46	28	21	11	6	112

The Canadian Shipowners' Association (CSA) represents 14 companies which perform the vast majority of shipping operations on the Great Lakes, St. Lawrence River and in Atlantic Canada. The St. Lawrence Ship Operators' Association has about 20 members, five of whom are also members of CSA.

There are currently 23 Canadian-flagged tankers operating in the Atlantic region, St. Lawrence River, and Arctic resupply service. Lawrence system. Soconav is the largest tanker operator, with ten vessels in domestic service and three leased out to international operations.

Northern Resupply Systems

Northern resupply systems include the Athabasca, the Mackenzie River/Western Arctic, the Keewatin, and the Eastern Sealift.

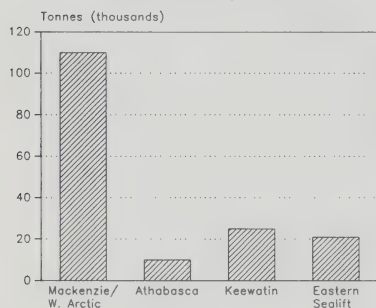
The Athabasca resupply system serves communities located along the eastern (Saskatchewan) and western (Alberta) shores of Lake Athabasca. Three licensed carriers, operating out of bases at Fort McMurray and Fort Chipewyan, provide seasonal barge service to these points. The principal carrier is A. Frame Contracting Ltd. with a fleet of one tug, seven barges and one self-propelled barge. The other two competitors are Macdonald Marine Transport Ltd. and Lake Athabasca Transport. Other services are offered by smaller, non-licensed operators such as Gerard Barging. The total volume of bulk fuel and community resupply goods moved in the system by licensed carriers in 1993.

FIGURE 4.22: Northern Marine Resupply Systems



The Mackenzie River/western Arctic resupply system provides seasonal tug and barge services to communities along the 1,750 kilometre length of the Mackenzie River to Tuktoyaktuk, west along the north slope of Alaska, and east another 1,820 kilometres along the Arctic coast and lower Arctic islands to Spence Bay. These services have also supported oil and gas exploration in the Beaufort Sea, as well as supplying northern defence installations. About 110,000 tonnes of bulk fuel and community resupply goods were carried in the system in 1993, supplemented by additional tonnage of oilfield equipment and other non-regulated cargo. Native-owned Northern Transportation Company Limited (NTCL) is, by far, the largest carrier in the system, operating a fleet of 15 tugs and 139 barges out of its main base at Hay River. NTCL is associated with Grimshaw Trucking and Distributing Ltd., which offers trucking services in Alberta, British Columbia and the Northwest Territories. Among the smaller competitors in the Mackenzie system are Cooper Barging Service Ltd. (Fort Nelson), Coastal Marine Ltd., and Beluga Transportation Ltd. (both of Inuvik).

FIGURE 4.23
Northern Community Resupply Systems
Annual Volumes, 1993



The Keewatin system provides seasonal tug and barge services to six communities on the shores of Hudson Bay. NTCL is the exclusive operator with a fleet of one tug and four barges based at Churchill, Manitoba. Bulk fuel is distributed from a tank farm managed by Imperial Oil, under contract to the Government of the Northwest Territories, and represents about three-quarters of the traffic carried. Deck cargo makes up the remaining one-quarter of the total annual volume of about 25,000 tonnes.

The annual Eastern Arctic Sealift provides resupply services to some 28 northern sites and communities on the Labrador coast, in Hudson Strait, east Baffin, Foxe Basin, the mid- and high-Arctic, and Greenland. The Canadian Coast Guard-Northern manages the sealift, contracting with commercial cargo vessels and tankers to transport dry cargo and bulk fuel from its main base in Montreal or other ports in the St. Lawrence River and Atlantic provinces. Participating carriers in the 1993 sealift included C.A. Crosbie Shipping Ltd, Logistec Navigation Inc., Transport Igloolik Inc., Fednav International Ltd., and Soconav Inc. The total volume shipped in 1993 was about 21,000 tonnes.

Canadian Ports

The Canadian port system provides the key links between marine carriers and road/rail services and represents a key element in the structure of the transportation industry.

*Canadian ports are key links
in the movement of both
domestic and international
traffic.*

There are some 365 commercial ports under federal jurisdiction. While administrative structures are varied, the common purpose of port authorities is to provide the necessary infrastructure of wharves, cranes, storage facilities, and services such as navigation, security, and property management. Actual port operations are carried out by private companies, terminal operators and shipping lines.

FIGURE 4.24: Major Canadian Ports

Fifteen of the largest ports are administered by Canada Ports Corporation, either through local port corporations (Halifax, Montreal, Prince Rupert, Quebec, Saint John, St. John's, Vancouver) or directly from headquarters as "divisional" ports (Belledune, Churchill, Port Colborne, Port Saguenay/Baie des Ha! Ha!, Prescott, Sept-Îles, Trois-Rivières). These represent a mixture of large, multi-purpose facilities and smaller specialized ports which handle the vast majority of Canada's import and export traffic, including bulk, general and containerized cargo.

Nine other large ports are administered by harbour commissions (Oshawa, Toronto, Hamilton, Windsor, Thunder Bay, Fraser River, North Fraser, Nanaimo and Port Alberni) which report to either the Minister of Transport or to Cabinet. These ports offer services to a wide variety of industrial sectors, but handle primarily bulk commodities such as steel, automobiles, and forest products.

Local port corporations and harbour commissions operate with a significant degree of autonomy, but, unlike U.S. ports, they must have federal funding and/or approval for any major capital projects.

The numerous other small ports are administered through the Harbours and Ports directorate of the Canadian Coast Guard.

Freight Forwarders

Freight forwarding companies in Canada play a significant role in transportation. Their total sales of \$1.4 billion are made up of about 60 per cent international and 40 per cent domestic shipments. There are approximately 280 freight forwarders, located mostly in Vancouver, Toronto and Montreal. Canadian forwarders tend to build up their North American service networks through agency agreements, partnerships, mergers, and acquisitions instead of expanding through overseas branch offices.

FIGURE 4.25
Freight Forwarder Shipments
By mode - 1990

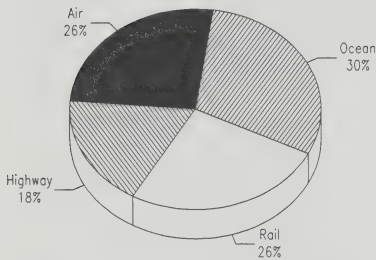


TABLE 4.16

Major Freight Forwarding Companies Operating in Canada, 1991

Name	Country of Ownership	Head Office
Beacon International Despatch	Canada	Brantford
Consolidated Fastfrate Transport	Canada	Toronto
Cottrell Air Freight	Canada	Toronto
Danzas Canada	Switzerland	Toronto
Delmar Freight Forwarders	Canada	Montreal
Gillespie-Munroe	Canada	Montreal
David Kirsch Forwarders	Canada	Montreal
Kuehne & Nagel International	Switzerland/U.K.	Toronto
Lep International	U.K.	Toronto
Locher Evers International	Canada	Vancouver
MSAS Cargo International (Canada)	U.K.	Toronto
Murray & Robinson Freight Services	Canada	Toronto
Nippon Express Canada	Japan	Toronto
Panalpina	Switzerland	Toronto
Right-O-Way Air Express and Cargo	Canada	Toronto
Schenker of Canada	Germany	Toronto
Starber International	Canada	Montreal

Services provided by freight forwarders include consolidation and deconsolidation, chartering, heavy lifts, and movement of specialized commodities. Many freight forwarders will also provide documentation and brokerage services, such as preparation of bills of lading, insurance, space reservations, export and import permits, customs clearance, waybills, and banking requirements.

A large proportion of the freight forwarding business is dominated by a few major competitors. Most of the larger forwarders belong to the Canadian International Freight Forwarders Association (CIFFA). Another association involved with the industry is the Canadian Association of Customs Brokers.

Intermodal Alliances

Railways and trucking companies improved their competitive position in North American markets, through intermodal alliances.

In an effort to increase their market share of intermodal traffic and to respond to shippers' demands for a seamless North American transportation network, Canadian railway and trucking companies have been forging alliances with both U.S. and Canadian carriers.

In early 1993, CN announced a partnership with American trucking giant J.B. Hunt that covers hauling freight between Canada and the United States. This long-term alliance provides for the transport of J.B. Hunt's 48-ft. trailers over CN's rail lines between Chicago, Toronto and Montreal. When CN opens its international St. Clair River Tunnel in late 1994, J.B. Hunt will add containers to its intermodal traffic flow.

CN also entered into an alliance with APL Land Transport to offer rail service to Toronto and Montreal from Mexico City. This partnership enables CN to offer its customers a U.S.-Mexico-Canada container service.

In the fall of 1993, CN and KLLM Transport of Jackson, Mississippi — a major temperature-controlled carrier of fruits and produce in the United States — agreed to cooperate in the movement of fruit and vegetable traffic from the Gulf States and California to Canada.

In the spring of 1993, CN and Maritime-Ontario Freight Lines Ltd., announced a long-term agreement under which CN will haul 50 per cent of the LTL-carrier's traffic between Central Canada and the Maritimes.

CN also formed an alliance with Kleysen Transport of Winnipeg. The joint service, which began January 1, 1994, covers intermodal traffic between Vancouver and Montreal and includes intermediate points.

The Agency's 1993 Motor Carrier Interview Program revealed that more than one-half of the trucking firms interviewed indicated being involved in partnerships, or having commercial agreements with the railways. The most often cited reason for their involvement in intermodal activities was that shippers wanted this service. Fifty-nine per cent indicated that the volume of intermodal shipments transported by their company had increased. Many carriers stated that they would like to increase their intermodal activities.

TRANSPORT SERVICES

Highlights of 1993

Air

In an attempt to better match capacity with demand, carriers reduced frequencies, downgauged aircraft types on some routes, redeployed capacity to faster growing routes, and delayed the startup of new services.

Rail

The railways responded to increased competitive pressures in both North American and off-shore markets by investing in new facilities and rolling stock and by introducing improvements and innovations to their services.

Extra-Provincial Trucking

Trucking firms responded to shippers' demands for improved service by investing in new equipment and expanding into new markets, including the U.S.

Marine

The number of conference shipping lines serving both the east and west coasts of Canada declined appreciably in 1993 but was offset by a corresponding increase in independent operators.

Introduction

This section outlines actions taken by carriers in 1993 that impacted on the levels of service they were able to provide to travellers and shippers and, where possible, quantifies the changes in service levels that occurred. In addition to looking at the supply side, i.e. what the carriers offered in terms of capacity or service, this section also relies on the Agency's numerous surveys to gain insights into the opinions of travellers and shippers on the levels of transportation service provided in 1993 and on how these levels have changed over time.

Air

Air Canada

Air Canada deployed excess domestic capacity to transborder markets.

As part of its cost control program, Air Canada twice reduced domestic capacity during 1993. Some aircraft previously used in the domestic market were redeployed primarily to transborder routes to handle summer demand and increased connection opportunities with United Airlines and Continental Airlines. The introduction of service to New Delhi, India as an extension of Vancouver-London was accommodated by redeploying its existing B-747 fleet.

TABLE 5.1
Air Canada's Fleet Composition

1992	1993	On Order
31 A-320s	34 A-320s	6 A-320s ⁴
3 B-747-100s	3 B-747-100s	6 A-340s ⁵
3 B-747-200s	3 B-747-200s	24 Canadair RJs ⁶
3 B-747-400s	3 B-747-400s	5 B-767-300ERs ⁷
21 B-767-200s	21 B-767-200s	
5 DC-8s(all cargo)	1 B-767-300ER ²	
35 DC-9s	5 DC-8s(all cargo) ³	
7 L-1011s ¹	35 DC-9s	
	4 L-1011-100s ¹	
108	109	

¹ In storage.

² Wet Leased to Polynesian Airlines.

³ A contract has been signed to sell all 5 DC-8s to DHL.

⁴ Have been forward sold for delivery in 1997 and 1998.

⁵ Deliveries to commence in 1996.

⁶ Deliveries of the first 10 aircraft are to commence in September 1994. Confirmation of the other 14 aircraft expected in 1994.

⁷ One aircraft delivery postponed, five remaining aircraft deliveries deferred until 1996/97.

FIGURE 5.1: Air Canada's Destinations; 4th Qtr., 1993

International Points Served

North American Points

Scheduled

Los Angeles, San Francisco, Boston, Houston, Chicago, La Guardia, Newark, Miami, Tampa, Antigua, Barbados, Bermuda, Kingston, Montego Bay, Nassau, Freeport, Pointe-a-Pitre, Port-au-Prince, Port of Spain, St. Lucia, Varadero

Code-Shared

Kingston, Montego Bay

Charter

Las Vegas, Atlantic City, Grand Junction, Ft. Lauderdale, Fort Myers, Orlando, West Palm Beach, Myrtle Beach, Honolulu, Maui, San Juan, St. Maarten, Cancun, Aruba, Acapulco, Puerto Vallarta

South American Points

Code-Shared

Caracas

European Points

Scheduled

Glasgow, London, Manchester, Berlin, Dusseldorf, Frankfurt, Nice, Paris, Lyon, Vienna, Zurich

Code-Shared

Madrid, Prague, Warsaw, Helsinki, Zurich

Charter

Dublin, Shannon, Belfast

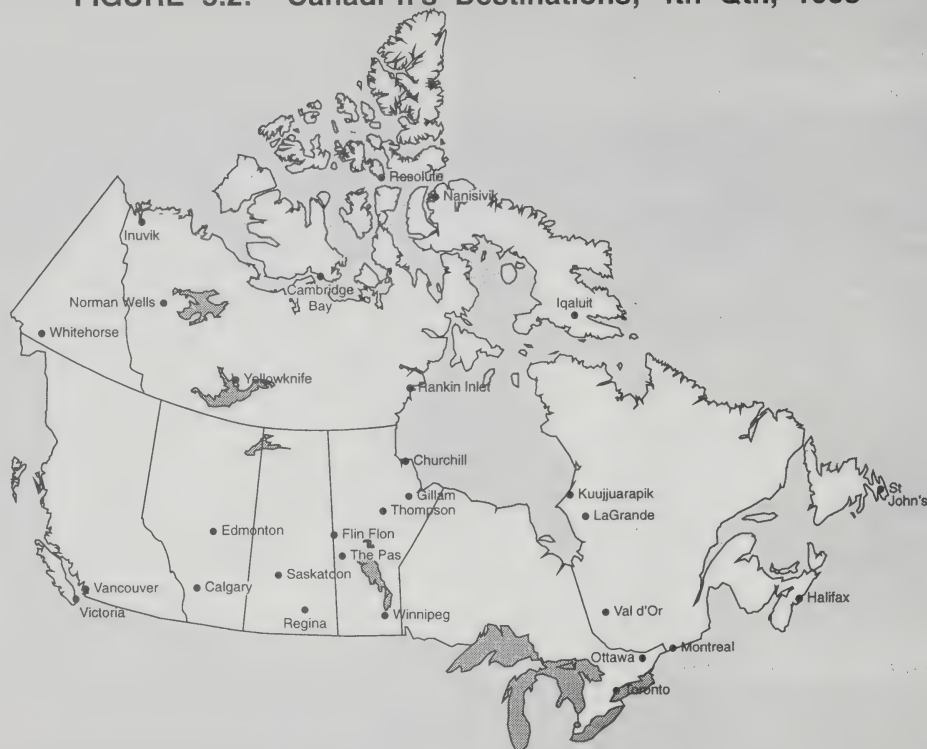
Asian Points

Scheduled

Delhi

Code-Shared

Amman, Seoul

FIGURE 5.2: Canada's Destinations; 4th Qtr., 1993

International Points Served

North American Points

Scheduled	Los Angeles, San Francisco, Honolulu, Mexico City
Code-Shared	St. Pierre Miquelon
Charter	Palm Springs, Phoenix, Fort Myers, Daytona Beach, Orlando, St. Petersburg, Ft. Lauderdale, Sarasota, West Palm Beach, Los Cabos, Mazatlan, Puerto Vallarta, Manzanillo, Zihuatanejo, Montego Bay, Grand Cayman, Acapulco, Nassau, Cienfuegos, Varadero, Cayo Largo, Puerto Plata, Punta Cana, San Juan, San Jose, Bridgetown, St. Kitts

South American Points

Scheduled	Sao Paulo
Code-Shared	Sao Paulo, Buenos Aires, Rio De Janeiro, Santiago

European Points

Scheduled	Rome, Milan, Paris, Munich, Frankfurt, London, Manchester
Code-Shared	Frankfurt

Asian/Pacific Points

Scheduled	Tokyo, Nagoya, Taipei, Hong Kong, Bangkok
Code-Shared	Taipei, Sydney, Nadi, Auckland, Melbourne

In 1993, Air Canada took delivery of three A-320s, but deferred the delivery of six A-320s from 1993/94 to 1997/98. Other postponed deliveries and deferrals involved Air Canada's B-767-300s. One B-767-300ER was delivered in August, 1993 and then immediately wet leased to Polynesian Airlines; delivery of the five remaining B-767-300ERs is slated to begin in 1996. In February, Air Canada reached an agreement with DHL Airways Inc. (DHL) for the sale of its five DC-8-73 all-cargo aircraft and related equipment.

Air Canada made major fleet announcements including the ordering of Canadair Regional Jets,

...and Airbus A-340s and,

...the modification of its DC-9 fleet.

Air Canada announced in December 1993 that it had ordered 24 Canadair Regional Jets with delivery starting in September 1994. Air Canada plans to deploy these 50 seat jets on new U.S. routes, or to replace larger aircraft used in markets facing soft demand; new routes slated for Regional Jet service included Ottawa-Washington, Ottawa-Chicago, Winnipeg-Chicago, Montreal-Cleveland and Calgary-Seattle.

Air Canada also announced in December, 1993 its decision to order six Airbus A-340 widebody aircraft, with options for three more, to be used on routes to Europe or Asia. At \$120 million per copy, the A-340s have lower seat mile costs than the B-747s in the airline's fleet and the range to fly non-stop between Toronto and Seoul, South Korea or Osaka, Japan.

At year-end, Air Canada announced that it was proceeding with a structural improvement and modernization program for its 35 DC-9-30s. The modification program, which will be done by Air Canada in conjunction with the manufacturer, McDonnell Douglas, will extend the operating life of the DC-9s beyond the year 2000. During the year, Air Canada also leased and/or sold three L-1011s.

Air Nova added two Dash 8-100s during 1993, while Air Alliance reduced its fleet by two Dash 8s for the same period. AirBC reduced its fleet by two aircraft — one Jetstream 31 and one Dash 8-100 aircraft. Air Ontario and NWT Air had no changes in the size of their respective fleets.

Canadi*n

*Canadi*n also redeployed excess capacity to international routes.*

In an effort to better match demand with capacity, Canadi*n reduced the capacity of its domestic services while it expanded its international capacity by redeploying widebodied aircraft from domestic to international routes, especially those to Pacific destinations.

In 1993, Canadi*n returned an A-320 to International Lease Finance Company as part of its domestic capacity reduction strategy. It also disposed of one B-737, and converted two B-737s to all-cargo configuration for the initiation of its cross-Canada freighter service. In October, 1993, it sold one B-767-300ER which had become surplus to Canadi*n's requirements after a further reduction in domestic capacity

was initiated in early 1993. Canadi*n still has 10 Airbus A-320s on order, which are scheduled for delivery in the 1996-1999 period.

Like their parent, Canadi*n's regional affiliates disposed of aircraft surplus to requirements in an effort to reduce excess capacity. Inter-Canadien removed four ATR42s from service while Canadian Regional West (formerly Time Air) disposed of one Convair 640. Canadian Regional East (formerly Ontario Express) disposed of nine Jetstream 31s, five Beech 1900s and five Embraer 120s and standardized its fleet type around the ATR42. Air Atlantic and Calm Air had no changes in the size of their respective fleets during 1993.

TABLE 5.2
Canadi*n's Fleet Composition

1992	1993	On Order
11 A-320s	10 A-320s	10 A-320s ³
52 B-737-200s ¹	45 B-737-200s ²	
3 B-747-400s	2 B-737-200s	
12 B-767-300ERs	(all cargo)	
<u>8</u> DC-10s	3 B-737s ⁴	
86	3 B-747-400s	
	11 B-767-300ERs	
	<u>8</u> DC-10s	
	82	

¹ Includes nine combi aircraft assigned to Canadi*n North.

² Includes five combi aircraft assigned to Canadi*n North.

³ Scheduled for delivery between 1996 and 1999.

⁴ Leased to America West Airlines.

*Canadian charter carriers
moved quickly to fill the void
created by the failure of
Nationair.*

Independent Air Carriers

This segment of the Canadian airline segment had some of the most dramatic fleet changes during 1993. These changes were largely due to both the demise of Nationair and new market opportunities for the charter carriers.

After the demise of Nationair, the remaining Canadian charter airlines quickly filled the void by expanding and upgrading their fleets, taking over charter contracts previously held by Nationair and rehiring many ex-Nationair employees.

Air Transat continued to add new international and charter programs to regional markets in the United Kingdom and France in addition to operating extensive charter programs to the Caribbean, Mexico, the United States and South America. It added four B-757s and one L-1011 wide-body aircraft. As a result, it emerged as Canada's largest charter carrier. In 1993, it focused its attention on Toronto, where its operations now exceed those at its Montreal base and, to a lesser extent, Vancouver.

FIGURE 5.3: Domestic Charter Routes*, 3rd Qtr., 1993**Large Jet Carriers**

Carrier	Points Served in 1993	1992 Jet Fleet	1993 Jet Fleet
Nationair ¹	7 Domestic, 33 International	6 Boeing B-747-100s 9 Boeing B-757-200s	*****
Air Transat	6 Domestic, 27 International	3 Boeing B-727-200s 2 Boeing B-757-200ERs 4 Lockheed L-1011s	3 Boeing B-727-200s 6 Boeing B-757-200ERs 5 Lockheed L-1011s
Canada 3000	11 Domestic, 27 International	7 Boeing B-757-200s	8 Boeing B-757-200s 3 Airbus A-320s
First Air ²	5 Domestic, 13 International	4 Boeing B-727-100s	3 Boeing B-727-100s 1 Boeing B-727-200F
Royal Airlines	9 Domestic, 15 International	3 Boeing B-727-200s	5 Boeing B-727-200s 2 Lockheed L-1011s
Advance Air Charters	(Charter carrier, international destinations)	*****	1 Douglas DC-8-55 1 Douglas DC-8-62
TOTAL		38 jet aircraft	38 jet aircraft

¹ Nationair ceased operations in April 1993.

² Also operates 17 turboprops and provides scheduled service to 23 domestic points and Nuuk, Greenland.

Canada 3000 added three Airbus A-320s and one B-757 aircraft to permit it to better serve several domestic markets on a year-round basis and sunspot routes in the off season. It expanded its presence in the Canada-Hawaii market by offering non-stop services from Vancouver. Canada 3000 also expanded its presence in the Montreal market, mainly from Dorval Airport. It is now the largest supplier of charter seats in the domestic market.

During the year, Royal Airlines expanded the number of sunspot destinations it serves and moved into the transatlantic charter segment largely to fill the gap left by Nationair. It also expanded its domestic operations and is now the second largest supplier of charter seats in the domestic market after Canada 3000. Royal added two B-727-200 aircraft for its domestic and sunspot routes and two L-1011 widebodies, mainly for transatlantic services.

First Air disposed of one Boeing 727-100 combi aircraft and added one B-727-200 all-cargo aircraft. In addition to providing extensive scheduled and charter air services in northern Canada, First Air was also active in the charter market in southern Canada.

*Advance Air Charters
commences operations.*

New entrant Advance Air Charters, based in Calgary, added two long-range DC-8s for the start-up of its international charter operations. Jetall Holdings Corp. (Jetall), the all-cargo airline based in Toronto, added an all-cargo Boeing 737.

Airline Capacity

*Capacity management took on
added significance during
1993 as Canadian carriers
faced another year of soft
demand.*

Structural developments in the Canadian airline industry can be inferred from the capacity figures reported in Table 5.3. Third quarter 1993 capacity, offered by all scheduled Canadian air carriers in both domestic and international markets, decreased by almost five per cent from the corresponding period in 1992.

Third quarter scheduled flight data shows that Air Canada cut capacity in the domestic market by 10.5 per cent, but increased its transborder and international capacity by almost nine per cent over 1992 levels. The increase in international capacity reflects Air Canada's newly formed strategic alliances in the United States with United and Continental, as well as the reintroduction of its scheduled services to New Delhi, India. Air Canada's share of domestic scheduled departing seats was 26.9 per cent in the third quarter of 1993; this is up one percentage point from 1992.

Air Canada's regional affiliates (Air Nova, Air Alliance, AirBC, Air Ontario, and NWT Air) decreased their domestic capacity by 9.6 per cent, but increased by almost 13 per cent the capacity offered in their international services in 1993. The increase in international capacity is largely due to Air Canada's Connectors' added frequencies to Continental's hub in Newark. Combined, Air Canada and its affiliates

accounted for 48.1 per cent of total domestic and international capacity in the third quarter of 1993; this was up slightly from their 47.2 per cent share a year earlier.

Table 5.3 also shows that Canadi*n decreased capacity in the domestic market by about 16 per cent, but increased international capacity by 22 per cent over 1992 capacity levels, reflecting increased demand in its international markets. Canadi*n's share of domestic departing seats was 24.1 per cent in the third quarter of 1993, down from 25.2 in 1992.

TABLE 5.3
Total Scheduled Departing Seats per Week, (000s Seats):
Third Quarter

Carrier	Domestic Southern		Total Domestic		International		Total	
	1993	(%) change from 1992	1993	(%) change from 1992	1993	(%) change from 1992	1993	(%) change from 1992
Air Canada	242.4	(10.1)	242.4	(10.5)	75.8	8.9	318.2	(6.5)
Connectors	148.5	(10.1)	164.1	(9.6)	10.7	12.6	174.8	(8.5)
Sub-Total	390.9	(10.1)	406.6	(10.1)	86.5	9.2	493.1	(7.2)
Canadi*n	190.6	(14.3)	217.1	(16.2)	33.1	22.1	250.1	(12.6)
Partners	134.4	4.5	163.8	2.8	2.5	(43.2)	166.3	1.6
Sub-Total	325.0	(7.4)	380.9	(8.9)	35.5	12.7	416.4	(7.4)
Other ¹	52.8	38.6	112.1	24.0	2.7	(34.1)	114.8	21.5
Total	768.7	(6.7)	899.5	(6.4)	124.8	8.7	1,024.3	(4.8)

() Indicates negative figures.

¹ Comprises 45 independent airlines.

Canadi*n's affiliates (Air Atlantic, Canadian Regional East and West, Calm Air and Inter-Canadien) increased domestic capacity by about three per cent while their international capacity decreased by 43 per cent. The capacity increase in the domestic sector was attributable to the affiliates' continued take over of routes previously served by Canadi*n. The large decrease in the international sector reflected the withdrawal by Ontario Express from several transborder routes to the U.S. As a result, Canadi*n and its affiliates accounted for 41 per cent of total domestic and international capacity in 1993; this was down from 42.3 per cent in 1992.

FIGURE 5.4
Domestic Scheduled Departing Seats
Per Week: Third Quarter, 1993

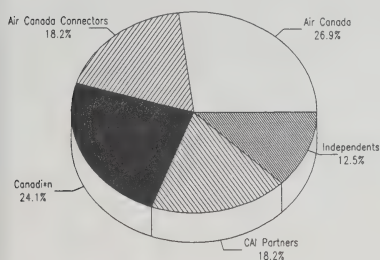
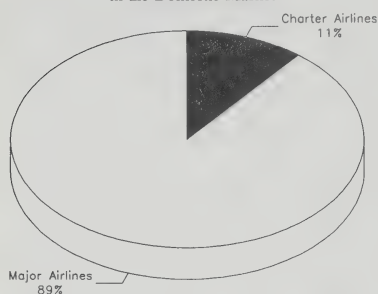


FIGURE 5.5
Charter Capacity on Select City-Pairs*
in the Domestic Market



* Includes all city-pairs in the following list except Toronto-Victoria/Gander/Stephenville

Domestic City-Pairs with Charter Air Service

Summer 1993 and Winter 1993-94

- Toronto
 - Vancouver
 - Calgary
 - Edmonton
 - Winnipeg
 - Halifax
 - St. John's
- Ottawa
 - Calgary
 - Vancouver
- Montreal
 - Calgary
 - Vancouver

Summer 1993 Only

- Toronto
 - Regina
 - Saskatoon
 - Quebec
 - Charlottetown
 - Gander
 - Stephenville
 - Victoria
- Vancouver
 - Calgary
 - Edmonton
 - Winnipeg
- Calgary
 - Victoria

Independent carriers registered an increase of 24 per cent in the domestic sector as they continued to fill the market voids left by the majors and their respective affiliates. However, the independents did experience a decrease of 34 per cent on international operations. In 1993, the independent carriers represented 11.2 per cent of total capacity, up slightly from 10.4 per cent in 1992.

Despite soft demand for air travel in 1993 in the domestic sector, the number of passengers travelling on domestic charter services has been increasing. Capacity to cater to this demand continued to be offered by the charter carriers, in conjunction with major tour operators in 1993.

Domestic charter capacity in several domestic markets was significant during the peak summer months. In 18 city-pairs, where the charter carriers Canada 3000, Royal Airlines, Air Transat and First Air competed directly with the scheduled carriers, they accounted for approximately 11 per cent of the total available scheduled and charter seats; this is up from nine per cent on only nine city-pairs in 1992. They also provided one-stop service in three other markets. Moreover, during the peak summer months, some programs offered by the charter carriers accounted for all the non-stop capacity in some markets, e.g., Toronto-Gander and Toronto-Stephenville. Furthermore, they were operating in ten city-pairs during the fall/and winter of 1993/94.

Regional and Inter-Regional Service

A sample of 151¹ city-pairs in both southern and northern Canada were analyzed with respect to changes in the levels of air service over the 1983-1993 period. The significance of comparisons with 1983 and 1987 is that these were the years preceding the initial relaxation of economic regulation in 1984 and the implementation of the official legislative reforms of the *NTA, 1987* on January 1, 1988.

In 1993, there was a general reduction in service levels relative to 1992, which had posted a mild increase in both flights and seats compared to the previous year. While the major carriers were prepared to use capacity as a strategic tool to improve market share (at the expense of passenger yields) in 1992, the mood in 1993, which was driven by huge losses the previous year, was one of consolidation resulting in a decline in services, especially direct jet services, in an attempt to increase load factors and improve yields.

In 1993, the Agency again surveyed members of the Canadian Professional Sales Association and the North West Commercial Travellers' Association for their views on air service. While the majority of the respondents felt that features and service in general had

¹ A list of these routes is provided in Appendix B.1.

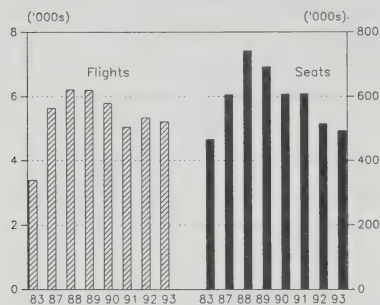
not changed since the previous year, most of the remainder felt that conditions had deteriorated. A significant number felt that the number of carriers providing services had declined, as had the number of jet flights and direct flights. When considering all factors (i.e., schedules, frequency, non-stop services and Frequent Flyer Plans), 38 per cent felt that there had been a deterioration in air service on domestic routes compared to 1992; this dropped to 23 per cent for transborder routes and to 16 per cent for international routes.

Top Twenty-Five City Pairs

TABLE 5.4
Changes in Weekly Scheduled Air Service:
Third Quarter 1992 and 1993

	Total Flights (Direct and Indirect)		Seat Capacity	
	Number	% increase (decrease) from 1992	Number	% increase (decrease) from 1992
Montreal-Toronto	645	(0.8)	64,810	(6.4)
Toronto-Vancouver	235	(12.0)	48,134	(4.2)
Calgary-Vancouver	509	(15.6)	44,907	(13.9)
Ottawa-Toronto	445	(12.1)	37,505	(9.8)
Calgary-Edmonton	439	9.5	33,652	0.5
Calgary-Toronto	176	(5.9)	28,138	(8.0)
Edmonton-Vancouver	297	50.8	24,942	31.1
Halifax-Toronto	202	(10.2)	23,065	(12.8)
Toronto-Winnipeg	164	(12.3)	18,685	(8.3)
Vancouver-Winnipeg	194	31.1	18,364	40.6
Edmonton-Toronto	122	(10.3)	18,178	15.5
Vancouver-Victoria	533	7.5	17,634	6.0
Halifax-Montreal	219	4.3	15,353	(6.4)
Calgary-Winnipeg	137	(13.3)	12,653	(1.2)
Calgary-Montreal	88	12.8	11,620	7.5
Montreal-Vancouver	87	7.4	11,395	(0.9)
Halifax-Ottawa	107	4.9	9,630	(2.4)
Thunder Bay-Toronto	90	(26.2)	8,432	(22.0)
Ottawa-Vancouver	61	(12.9)	7,398	(14.2)
Kelowna-Vancouver	169	(5.6)	7,397	(16.6)
Pr. George-Vancouver	85	(11.5)	7,160	(14.1)
St. John's-Toronto	64	(21.0)	7,090	(21.6)
Ottawa-Winnipeg	58	7.4	7,025	14.5
Calgary-Ottawa	55	(26.7)	6,576	(26.9)
Quebec-Toronto	38	0.0	3,496	0.0
TOTAL	5,219	(2.4)	493,239	(4.1)

FIGURE 5.6
Weekly Scheduled Flights and Seats,
Top Twenty-Five Markets, Third Quarter

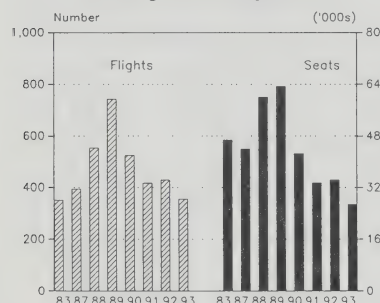


The top 25 city-pairs registered a decrease in both the number of weekly flights and available seats in 1993 compared to 1992. This reflects a trend toward increased use of non-jet aircraft, which tend to have fewer seats than jet aircraft, operating on indirect (i.e. multi-stop) flights. Seventeen routes experienced decreases in seat capacity. In total, the net reduction in weekly capacity was over 21 thousand seats, or just over four per cent; the triangle routes Montreal-Toronto and Ottawa-Toronto combined lost almost 9,000 seats.

On Montreal-Toronto, Canadi*n replaced some B-737s with Airbus A-320s, which slightly increased seats. However, Air Canada replaced some B-767s with DC-9s which greatly reduced seat capacity. The decline on Ottawa-Toronto was mainly due to cutbacks by Canadi*n.

Two routes, Edmonton-Vancouver and Vancouver-Winnipeg registered increases in seat capacity of 31 and 40 per cent respectively. In response to Air BC's jet service between Vancouver and Edmonton Municipal Airport, Canadi*n commenced its own B-737 jet service.

FIGURE 5.7
Weekly Scheduled Flights and Seats,
Inter-Regional, Third Quarter

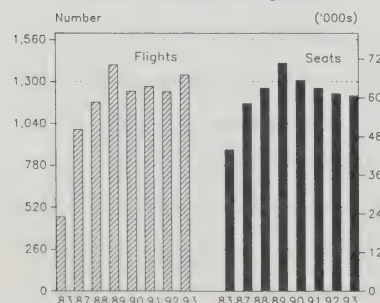


During the third quarter of 1993, the charter carriers, whose capacity is not included in the data, in conjunction with tour operators, were operating in 14 of the top 25 city-pairs in Canada. Their presence on these routes was reflected in declines of between eight and 15 per cent in available scheduled seats (direct and indirect) on these city-pairs.

Inter-Regional Services

Overall, inter-regional routes other than the top 25 experienced a decline of almost 23 per cent in the number of seats offered during 1993. Non-stop, multi-stop and jet flights all decreased in the 18 city-pair sample, with the exception of non-jet flights which increased. The increase in non-jet flights is due to the airlines' continued use of frequency as a tactic to maintain both market share and presence. Exceptions to the downward trend included Ottawa-Edmonton/Regina, where Air Canada re-introduced one-stop jet services.

FIGURE 5.8
Weekly Scheduled Flights and Seats
Atlantic Provinces, Third Quarter



Atlantic Provinces

A sample of 14 city pairs in the Atlantic provinces indicated that the shift towards smaller, non-jet aircraft flying multi-stop routings continued in 1993. Whereas total available seats offered in these 14 city-pairs declined by 0.8 per cent in 1993 compared to the same period during 1992, the total number of flights increased by nine per cent and the number of indirect flights and non-jet flights increased by 15.5 per cent and 19.3 per cent, respectively. The increase in flights illustrates that carriers still consider frequency an important competitive weapon in retaining market share.

Elimination of jet services occurred in several markets, notably Sydney-Halifax, Stephenville-St. John's and Stephenville-Halifax by Air Atlantic.

The Stephenville-Gander service was reduced substantially, while Moncton-Halifax saw a large swing to non-jet aircraft.

Direct services between Deer Lake and St. John's/Halifax grew, resulting in increases in available seats on the two city pairs of eight and 10 per cent, respectively.

Ontario and Quebec

An analysis of 16 Ontario and Quebec city-pairs showed that the airlines are relying on smaller non-jet aircraft to provide the majority of flights which are in most cases direct (non-stop). The analysis also revealed that the number of seats offered had decreased by one per cent in 1993 when compared with 1992. The number of jet flights remained unchanged from 1992 while non-jet flights decreased by 12.3 per cent. The only city-pair receiving jet service in this sample in 1993 was Montreal-Val-d'Or (in 1988, 13 of the routes had jet service). However, direct flights decreased by almost 16 per cent in 1993 over 1992 levels, while multi-stop (indirect) flights increased by just over four per cent.

Increases in seats occurred in markets where Canadian Regional East (formerly Ontario Express) deployed larger ATR-42 turbo props to compete with Air Ontario on routes such as Toronto-Windsor, Toronto-London, Toronto-Sudbury and Toronto-Timmins. A major trend throughout this sample was that market voids left by carriers were quickly filled. For example, Bearskin Lake Air Services commenced turbo-prop service to Ottawa, Sudbury, Sault Ste. Marie, Timmins, North Bay, Thunder Bay, Dryden, Red Lake and Winnipeg when Ontario Express withdrew from these markets. Other service highlights in this sample saw Air Creebec leaving the Montreal-Val-d'Or market while Air Alliance increased its presence on the Montreal-Rouyn/Noranda and Montreal-Saguenay/Bagotville routes.

Western Provinces

A sample of 21 city-pairs in British Columbia and the prairie provinces showed that total available direct and indirect (same-plane) flights declined by 10 per cent and total available seats by 3.4 per cent. There was also a shift from direct to indirect flight routings, but flights operated by both jet and non-jet equipment declined fairly proportionately. Some markets that experienced large declines in available seats include Edmonton-Regina, Cranbrook-Vancouver, Edmonton-Winnipeg, Grande-Prairie-Edmonton, and Calgary-Winnipeg.

City-pairs that experienced increases in available seats include Edmonton-Saskatoon, and Saskatoon-Winnipeg. New direct jet services were started from Edmonton International to Saskatoon by Air Canada and AirBC, when AirBC withdrew from Edmonton Municipal-Saskatoon. Air Canada also entered the Saskatoon-Winnipeg market with 36 non-stop DC-9 flights per week.

FIGURE 5.9
Weekly Scheduled Flights and Seats
Ontario and Quebec, Third Quarter

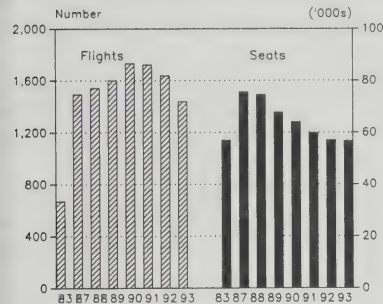


FIGURE 5.10
Weekly Scheduled Flights and Seats
Western Provinces, Third Quarter

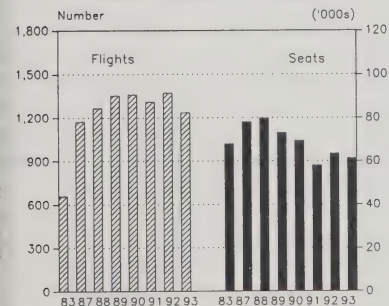


FIGURE 5.11
Weekly Scheduled Flights and Seats,
North-South Services, Third Quarter

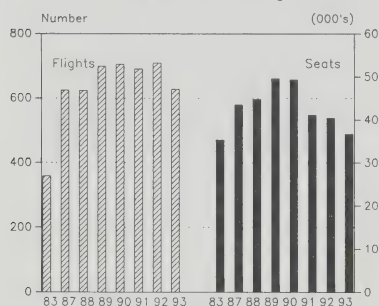
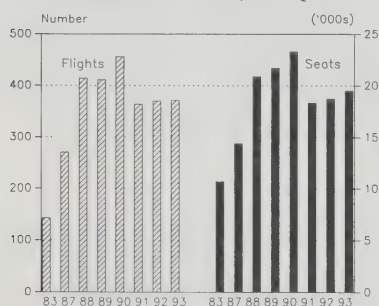


FIGURE 5.12
Weekly Scheduled Flights and Seats,
Northern and Remote Areas, Third Quarter



During 1993, several local and regional carriers were active in the Western Region. Examples, include Connectair adding Vancouver-Powell River; Central Mountain Air adding daily Vancouver-Victoria, Prince Rupert-Prince George-Terrace, and Vancouver-Prince George. Harbour Air added Victoria Harbour-New Westminster Harbour.

North-South Services

On a sample of 24 city-pairs (representing routes between northern centres and cities in the southern portion of the country), total available flights and seats in 1993 declined relative to 1992, but were at levels comparable to what was experienced in 1991. Despite the overall declines in service, some north-south routes had increases as Canadian North, NWT Air, other affiliates, and First Air positioned themselves to remain competitive. For example, Calgary-Inuvik, Fort McMurray-Calgary and Edmonton-Yellowknife all experienced increases in flights and seats over 1992. Other key developments on north-south routes saw Canadian North withdraw from its Montreal-Kuujuaq-Iqaluit service, but initiate new services on the Ottawa/Montreal-Iqaluit route competing directly with First Air. In addition, Canadian North started a new service between Edmonton, Calgary, Yellowknife, Rankin Inlet and Iqaluit in direct competition with NWT Air.

Northern Services

On a sample of 33 city pairs (representing routes between centres in the northern designated zone), the total number of flights increased by only one-half per cent over 1992, while the total number of available seats increased by four per cent. Within this statistic there was a significant shift towards more indirect routings using non-jet aircraft; currently, 74 per cent of the flights in the sample are direct and 63 per cent use non-jet aircraft.

Key service developments within the North saw First Air expanding same-plane direct jet service between Iqaluit and Kuujuaq from two to 18 flights, using B-727-100s and adding non-stop flights between Pangnirtung and Broughton, giving passengers the added convenience of not having to connect at Iqaluit. Canadian North stopped operating its Kuujuaq-Iqaluit and Iqaluit-Hall Beech jet services, but added new jet services on the Yellowknife-Rankin Inlet-Iqaluit route in competition with NWT Air's jet service. Canadian Regional West withdrew from Watson Lake in the Yukon. North-Wright Air began providing indirect Twin Otter service on the Norman Wells-Yellowknife route and Inuvik-based Aklak Air began operations on the Inuvik-Fort McPherson route.

**FIGURE 5.13: Mainline Jet Services - Northern Region;
3rd Qtr., 1993**



Scheduled Carriers Serving Northern Canada: 1993

Carrier	Northern Network	Fleet
Air Canada Family (* denotes code-sharing only)		
AirBC	3 points in northern B.C. and Alta.	5 jets, 28 non-jets
Air Alliance	2 points in northern Que. and Nfld.	13 non-jets
Air Schefferville*	4 points in northern Que. and Nfld.	7 non-jets
Air Nova	3 points in northern Que. and Nfld.	5 jets, 10 non-jets
NWT Air	5 points in the N.W.T.	3 jets, 1 non-jet
Air Tindi*	5 points in the N.W.T.	16 non-jets
Aklak Air*	5 points in the N.W.T.	4 non-jets
Buffalo Airways*	10 points in the N.W.T.	9 non-jets
Northwestern Air Lease*	5 points in northern Alta. and the N.W.T.	7 non-jets
Canadi*n Family (* denotes code-sharing only)		
Canadian North	16 points in northern Man., Que., and the N.W.T.	9 jets
Air Atlantic	3 points in northern Nfld.	3 jets, 11 non-jets
Calm Air	24 points in northern Man. and the N.W.T.	8 non-jets
Canadian Regional East	5 points in northern Ont.	7 non-jets
Inter-Canadian	9 points in northern Que. and Nfld.	8 non-jets
Alexandair*	8 points in northern Que.	9 non-jets
Canadian Regional West	10 points in northern B.C., Alta., and the N.W.T.	7 jets, 19 non-jets
Select Non-Affiliated Independents		
Air Creebec	18 points in northern Ont. and Que.	9 non-jets
Air Inuit	18 points in northern Que. and the N.W.T.	16 non-jets
Air Manitoba	9 points in northern Man. and Ont.	4 non-jets
Bearskin Lake Air Services	25 points in northern Man. and Ont.	27 non-jets
First Air	21 points in northern Que. and the N.W.T.	4 jets, 17 non-jets
Labrador Airways	22 points in northern Que. and Nfld.	13 non-jets
North-Wright Air	7 points in the N.W.T.	14 non-jets
Ptarmigan Airways	12 points in the N.W.T. and the Yukon	1 jet, 9 non-jets

Air Inuit shifted equipment types on some northern Quebec routes. Between Kuujuaq and Kangiqsualujuaq, indirect non-jet services were changed to fewer direct services. Between Kuujuarapik-Inoucdjouac and Povungnitung-Sanikiluaq, and on the Umiujuaq routes, Twin Otters were replaced by larger HS-748s.

Vision Airways added service in Northern Ontario markets previously served by Ontario Express.

Transborder and International Air Service Developments

Air Canada improved its international service by entering into strategic alliances with major U.S., European, and Asian carriers as well as initiating new direct service to India and improving transborder and transatlantic services.

As a result of its commercial and marketing alliance with United Airlines, Air Canada increased flights to United's hubs in the United States. For example, all Air Canada flights are timed to optimize connections at Miami (for South American traffic), Los Angeles and San Francisco (for Asian, South Pacific and California intra-state traffic) and Chicago (for North American traffic).

As a result of its investment in Continental, Air Canada increased service to Newark during 1993 and began flying its dormant Houston authority to link with Continental's hub at that point. Air Canada also moved to Continental's hub at Newark Airport to permit better connections between the two carriers' services. Its regional affiliates in eastern Canada also introduced and increased scheduled flights to Newark and Cleveland to take advantage of the significant potential to exchange traffic.

In April, 1993, Air Canada implemented a new strategic alliance with Air France which includes a code-share agreement on flights between Toronto and Paris. In the fall of 1993, Air Canada concluded a new alliance with Korean Air. Air Canada now offers direct services from Toronto to South Korea via Vancouver through code-share flights operated by Korean Air.

In November, 1993, Air Canada reintroduced service with B-747-400s to New Delhi, India through London, England. Direct service between Vancouver and London was re-arranged with the airline's other Canada-U.K. flights to permit hubbing at Heathrow Airport in London. This has resulted in improved cross connections linking Canadian originating services and United Airline's services arriving from the U.S. with New Delhi, India.

On January 26, 1994, Air Canada announced that it was stopping all litigation preventing Canadi*n from closing its deal with AMR. In February, 1994, a day after Air Canada and PWA announced that they

had resolved their disagreement over the transfer of CAIL's hosted services from Gemini to AMR's Sabre, Canada's Transport Minister announced that Air Canada had been designated as Canada's second carrier serving the Canada-Japan market. Air Canada plans to commence service to Japan in September, 1994 when the new Osaka airport opens.

With the exception of announcing its intention to restart services between Vancouver and Beijing during 1994, Canadi*n mainly concentrated on the implementation of its overall restructuring plan and the conclusion of its strategic and equity alliance with American Airlines. It implemented some changes to its international services including daily service between Vancouver and Taipei. In March, 1993, Canadi*n discontinued its Montreal (Mirabel)-Paris service, opting to serve the Montreal market via Toronto.

Air Cargo

During 1993, Air Canada signed an agreement to sell its five DC-8-73 aircraft to DHL, a courier company. Following this sale, Air Canada plans to continue offering all-cargo freighter capacity within Canada under lease arrangements and to provide cargo services with containers on its passenger and passenger/combination cargo aircraft.

During the year, Air Ontario initiated nightly Dash 8 cargo flights between Thunder Bay and Winnipeg while Air Nova put into service the first Dash 8 combination aircraft capable of carrying 29 passengers and 4,000 pounds of cargo on its St. John's-Goose Bay-Wabush and St. John's-Deer Lake-Wabush routes.

Canadi*n introduced a new overnight all-cargo B-737 service during 1993 between Toronto, Winnipeg, Edmonton and Vancouver westbound and between Calgary, Winnipeg, and Hamilton eastbound. Each flight has a cargo lift capability of 15,000 kilograms. Canadi*n continues to carry belly cargo on all its scheduled passenger flights.

A significant air cargo development was Purolator's decision to use its own air cargo fleet, rather than use Air Canada's fleet of DC-8s. The new Purolator fleet will be the largest such fleet in Canada and will consist of seven B-727-100 aircraft and four Convair 580 turboprops, all chartered from Kelowna Flightcraft. The fleet will serve all major centres in Canada on a nightly basis, under the Purolator brand name.

Jetall of Toronto added an all-cargo B-737 jet to its fleet and deployed the aircraft on the Montreal-Dayton route on behalf of Burlington Air Express. Canair Cargo Ltd. added two all cargo B-737 jets to its fleet. The new jets were added to handle shipments too large to be taken on its Convair 580s.

Shippers' Views

Approximately one-third of the respondents to the Agency's 1993 Shippers' Survey indicated they used air freight for less than 10 per cent of their total shipping traffic. Compared to 1992, 70 per cent said that their volume of shipments by air had not changed while 22 per cent said that they had increased by up to 20 per cent. One-third of shippers use air freight for domestic shipments, one-quarter ship to/from the United States and one-fifth ship to/from other international destinations; Canada-Mexico traffic has yet to gain a significant share of total air shipments.

Most shippers using air cargo make transportation arrangements directly with the air carriers for domestic and Canada-U.S. shipments; for other international shipments, the majority use freight forwarders, followed by direct arrangements with the carriers.

The majority of shippers use scheduled services on all-cargo aircraft, followed by scheduled services on passenger aircraft (in the bellyhold of passenger aircraft as well as on the main-deck of passenger-cargo combination aircraft).

Over 60 per cent of the respondents felt that international air cargo services, including Canada-U.S., were unchanged from 1992 while almost three-quarters of the respondents felt that domestic services were unchanged. Of those who noted a change, 21 per cent felt that Canada-U.S. services had improved while 14 per cent were of the opinion that other international and domestic air cargo services had improved.

Eighteen per cent of respondents who use domestic air cargo services use confidential contracts with air carriers; of those, 81 per cent use them for over half of their air freight volume. Respondents felt that the proportion of traffic moved under confidential contracts in 1993 was unchanged from 1992.

In the North, Canadian North's nine B-737 combi jets, NWT Air's three B-737 combis and one Hercules; and First Air's three B-727-100 combis, one B-727-200 freighter and turboprops continued to represent considerable freight capacity. This capacity, supplemented by the regional affiliates and some large independent operators, assists in meeting the demands of northern shippers, as well as offering integrated and seamless access to southern, transborder and international airline networks.

Freight Forwarders' Views

In its 1993 Freight Forwarders Survey, the Agency asked respondents to rate air cargo services offered by Canadian and foreign air carriers in various international markets. The following table shows the distribution of responses for those who indicated air cargo services were reasonable or good. In all cases, the foreign air carriers received a higher rating.

According to 79 per cent of the respondents, the most important factor in selecting an airline for air cargo services was price.

Air Cargo Services Rated Reasonable to Good

	Canadian air carriers	Foreign air carriers
Markets rated		
Canada-U.S.	76%	89%
Canada-Europe	86%	94%
Canada-Asia	73%	88%
Canada-Latin America/Caribbean	56%	79%

In terms of U.S. airport gateways for Canadian originating air cargo destined for third countries, six per cent of the respondents indicated that more than 51 per cent of their cargo moved via the U.S. For inbound air cargo destined for Canada, eight per cent indicated that over 51 per cent came via the U.S. The most important factor cited in deciding to ship via the U.S. was the availability of direct air services between the U.S. and the ultimate destination.

About 12 per cent of the freight forwarder respondents indicated that over 51 per cent of their outbound cargo destined for third countries moved on road feeder services (RFS) to U.S. airports; for inbound air cargo destined for Canada, only four per cent of the respondents used RFS from U.S. airports for over half of their shipments. For air cargo destined to U.S. points, 15 per cent of the respondents used RFS to a U.S. airport gateway for over 51 per cent of their shipments; for air cargo destined to Canadian points, 16 per cent used RFS for over 51 per cent of their shipments. The most important factor which influenced two thirds of freight forwarder respondents that used RFS to and from the U.S., was price.

Rail

Faced with ever increasing competitive pressures in both North America and off-shore markets, shippers have been demanding more sophisticated railway equipment and more timely and better service. The railways have responded by investing in new facilities and rolling stock and by introducing improvements and innovation to their services. CN and CP Rail have also been building relationships with both U.S. and Canadian trucking firms to improve and expand their intermodal services.

CN North America

In 1993, CN added 2,400 rail cars to its fleet to relieve a shortage of cars for agricultural products. It also leased an additional 1,400 similar cars from the United States on a short-term basis.

To meet the higher demand for rail transportation in the pulp industry, CN started to take delivery of 300 special higher-capacity, 100 ton capacity wood-pulp cars in April, 1993. These cars, which are being built in Nova Scotia, can carry one-third more pulp than conventional cars. Their production is to be completed by March 1994. Another 750 cars are being modified at CN's Winnipeg shop to add 30 per cent to their carrying capacity. Most of the cars are slated to service pulp plants in Alberta.

In response to increased demand for temperature-controlled service, CN took delivery of an additional 100 temperature-controlled containers to keep produce and other temperature-sensitive products above freezing during the winter months. This will bring its total fleet of these units to more than a thousand. Until now, many shippers relied on highway carriers to carry time-and temperature-sensitive shipments.

CN is also introducing equipment and new service arrangements which are designed to help future potash sales. A prototype of a new rail car was on trial service for Canpotex, the off-shore marketing arm of the Saskatchewan potash industry. Working with Canpotex, CN designed and developed a new articulated rail car that increases car-carrying capacity by a third. Canpotex is to decide in 1994 on whether to adopt this car as its standard equipment.

In September, 1993, CN commenced construction on the 1.9 kilometre St. Clair Tunnel linking Sarnia, Ontario with Port Huron, Michigan. The project is expected to be completed in late 1994. The new tunnel, when completed and in operation, will be the sole railway tunnel on the Canada-U.S. border capable of handling double-stack container trains. It is expected to cut rail transit time between Halifax/Montreal/Toronto and Chicago by about 12 hours. The benefits will allow CN to streamline the annual flow of some 275,000 freight cars, including specialized auto and container cars, eliminate the need to transfer 80,000 railcars a year to barges, and relieve congestion caused by the smaller existing tunnel. The tunnel connects Ontario with the lines of CN's Grand Trunk Western which serves Chicago and Detroit. CN was also installing new high speed tracks at Sarnia and Port Huron, capable of handling double-stack and tri-level auto-carrying flat cars.

Over the next three years, CN is to acquire three new gantry cranes which will increase capacity at its key intermodal terminal in Brampton.

A run-through agreement between CN and Conrail allows for through train movements between Montreal and Selkirk, New York. This

eliminates locomotive changes at the U.S.-Canadian border which reduces transit times by up to a day. The agreement made the railways more competitive with trucks in the New York/Montreal corridor. Nearly 90 per cent of traffic on this route is exports, principally newsprint and aluminum, destined to the U.S.

CN and CSX Intermodal (CSXI) announced a new service linking 12 points on CN's network with all terminals on CSXI's eastern network. Traffic is to be exchanged at Detroit and Chicago. CSXI and CN joined forces to improve the handling of highway trailers moving by rail between Canada and U.S. Southeast and Midwest by providing through-rates for trailers moving on CN's daily Laser trains.

An agreement between CN and Kleysen Transport covers intermodal traffic between Vancouver and Montreal and intermediate points, with food products a target market. The alliance will also provide Canadian shippers with access to the U.S. through rail hubs in Chicago and Detroit. This joint venture provides CN with a new intermodal link to markets in western Canada.

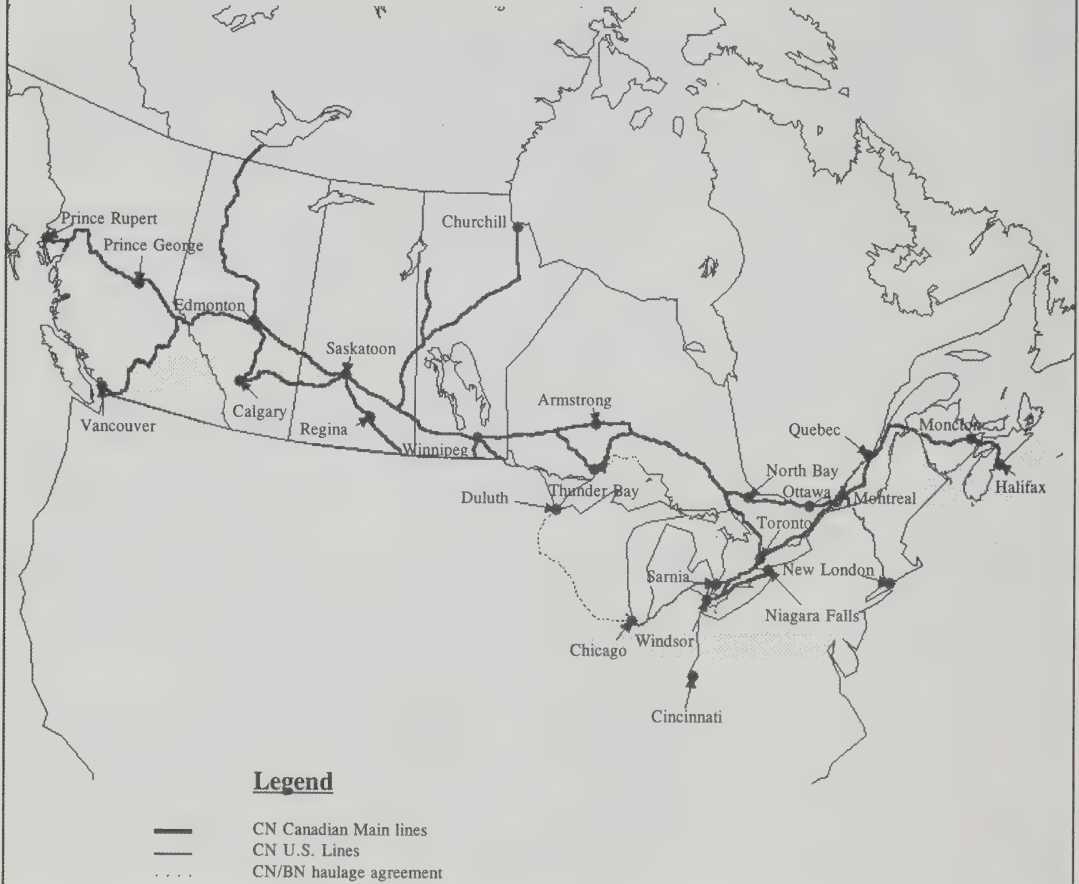
CN initiated a new Paper Train to haul Northeastern paper products from more than 30 points in Quebec, New England and Atlantic Canada directly to Chicago. By bypassing switching yards in Toronto and Sarnia, transit times are cut by as much as two days (nearly half).

In December, 1993, CN opened a new domestic intermodal terminal in Halifax which completes its coast-to-coast double-stack container network. The new terminal allows it to operate Laser service into Halifax instead of terminating in Moncton. This move is expected to increase domestic demand for export and import traffic.

CN inaugurated a new intermodal temperature-controlled service for perishable food products across Canada on their way to markets in Asia and Europe. This is designed to serve growing Asian and European markets for Canadian seafood products. This intermodal service connects through the Port of Vancouver for shipments to Asia and the Port of Halifax for shipments bound to Europe. This mini-landbridge service will shorten transit times, compared to an all-water route.

In cooperation with Revenue Canada-Customs and Excise, CN initiated a pilot customs clearance project at the border crossing in Sarnia, Ontario in an effort to streamline transborder shipments. The new system saves up to three days on the delivery of transborder shipments. An earlier initiative in January 1992 involved the notification of incoming shipments.

Importers, Revenue Canada and rail carriers are testing EDI techniques to relay information which could speed up customs clearance and reduce the risk of losing documents which delay shipments.

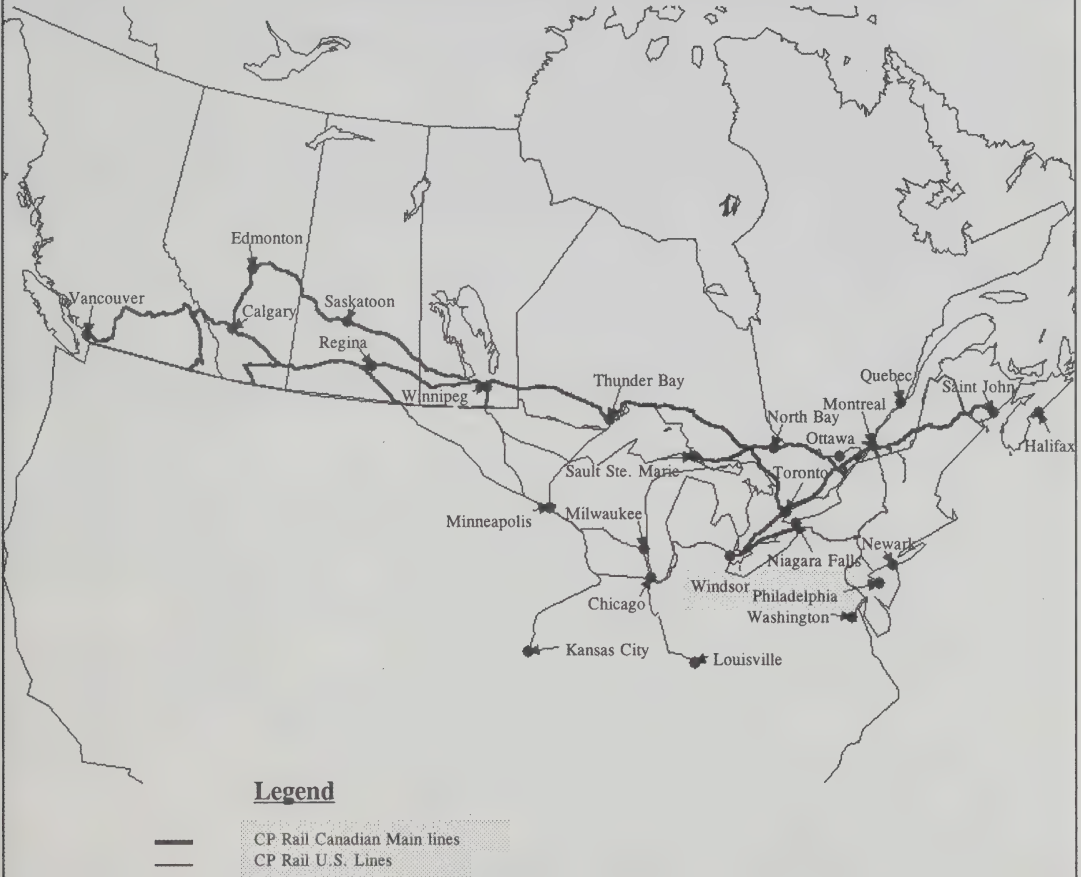
FIGURE 5.14: CN North America**Carrier****Network****Equipment**

CN North America

- CN
- Grand Trunk Western Railroad
- Duluth Winnipeg and Pacific Railway
- Central Vermont Railway

Operates in 8 Canadian provinces and 11 U.S. states.

1,887 locomotives
68,423 freight cars

FIGURE 5.15: CP Rail System**Carrier****Network****Equipment**

CP Rail System

- CP Rail

- Soo Line Railway

- Delaware and Hudson Railway

Operates in 8 Canadian
provinces and 19 U.S.
states.

1,600 locomotives
48,400 freight cars

CP Rail System

As part of its plan to develop intermodal options for shippers, CP Rail's New Forest Products Group built a freight car that meets market demand for fast, easy loading, protected transport. The new car has a retractable cover, which is easily rolled back to expose an open flatcar with bulkheads. The prototype was tested with lumber movements between Cranbrook and Vancouver.

A CP Rail triple-unit potash car is also being tested with the Saskatchewan potash industry. The new car, made up of three hopper cars linked by slackless drawbars, carries about 11 tonnes more potash per unit than three conventional hopper cars and allows for about 40 per cent more tonnage to be moved per potash train.

A \$2.5-million investment in high-capacity generators was placed in service for long-distance service for perishable traffic. Generators have made CP Rail's mini-landbridge intermodal service a competitive alternative to all-water overseas shipping. The reefer service links ports on both sides of the continent and cuts up to 11 days off the transit time to Japan.

In February, 1993, CP Rail completed its tunnel clearance projects in western Canada and Wisconsin. CP Rail now operates double-stack international and domestic container service between Vancouver and Toronto, Montreal and Chicago; between Chicago and Kansas City, Buffalo and Rouses Point, New York; and between the Port of New York/New Jersey and Montreal and Toronto.

A five-month track clearance project in New York state on 342 kilometres of Conrail-owned line was completed in August, 1993. This opens up the Binghamton-to-Buffalo route for CP Rail's double-stack rail service. Its completion is another step to achieving clearance for double-stack trains between the ports of Philadelphia and New York/Newark and intermodal hubs such as Chicago and Toronto.

An US\$80 million double-stack clearance project, to be completed in 1995, is under way in Pennsylvania. The project is jointly funded by the State, Conrail and CP Rail. Once completed, CP Rail will be able to run double-stack trains to Buffalo and then, through an agreement with Norfolk Southern, from Buffalo to Chicago. As well, CP Rail will have double-stack clearance between Oak Island, New Jersey and Canada.

In 1993, CP Rail announced a \$27.5 million investment project to enlarge the Windsor/Detroit tunnel, which it jointly owns with CN. When completed in 1994, the project will allow for tri-level railcars but not double-stack cars.

The 1993 rail agreement between CP Rail and Conrail gave CP Rail's Delaware and Hudson Railway access to Conrail's on-dock rail facilities

at Philadelphia and enabled CP Rail to provide direct rail service to more than 75 shippers in the Philadelphia area.

CP Rail and Guilford Transportation inaugurated a partnership aimed at improving intermodal rail service between Massachusetts and markets throughout the U.S. and Canada.

In 1993, CP Rail consolidated nine smaller regional customer service centres to a single centre at Winnipeg. The centre operates 24 hours a day and focuses on customer requirements and inquiries. Service staff track freight cars and order, supply and co-ordinate loads and equipment.

Shippers' Views

The Agency's 1993 Shippers Survey asked shippers to assess the various types of transportation services used by their company by market, namely: domestic; Canada-U.S.; Canada-Mexico and other international services. Twenty-nine per cent of the respondents to this survey indicated an improvement in the level of domestic service their company received from the Canadian railways in 1993 compared to 1992. A somewhat larger percentage, 33 per cent, indicated an improvement in transborder rail services. The majority of shippers utilizing rail services for the Canada-Mexico market reported no change in services in 1993.

While shippers of all sizes reported improvements for both domestic and transborder rail services, a higher proportion of large rail users reported improvements in rail domestic services. For transborder services, improvements were reported by both medium and large rail users. The few respondents who used rail service between Canada-Mexico and other international services were too few to be able to note a significant difference in their assessment of rail services.

The industry groups with the highest proportion of shippers reporting improvements in domestic rail services were: chemical and chemical products; mining, quarrying and oil wells; wood products; and the wholesale trade industry. Wood products and chemical products had more shippers reporting transborder rail improvement in services. Food products and wholesale trade industries had a few shippers reporting a deterioration in transborder railway service.

Respondents who had confidential contracts in 1993 gave a more favourable assessment of changes in all aspects of railway services than those who did not have contracts, and this was even more true for those transborder shippers who increased the proportion of their traffic moved under contract.

Shippers were asked to evaluate ten service factors in connection with the service they received from Canadian railways in 1993. Despite some variation among the shippers' evaluations of each factor, over half of the respondents said the railways provided good or very good services within

FIGURE 5.16
Reported Changes in Rail Services
1992 - 1993

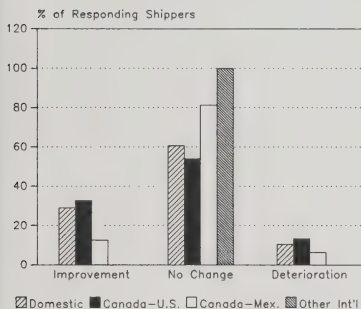


TABLE 5.5
Shippers Rating of Various Service Factors -
Rail Services - 1989, 1991, and 1993

	Rail Services			
	Domestic			Canada-U.S.
	1989	1991	1993	1993
	Good/Very Good Rating			
	<i>% of responding shippers</i>			
Equipment Supply	56	57	52	44
Equipment Condition	52	48	56	50
Service Frequency	n.a.	n.a.	53	50
Service Reliability	50	50	53	46
Transit Time	36	45	46	36
Shipment Tracing	69	64	62	54
Product Care/Cargo Handling	53	53	54	44
Claims Handling	38	39	50	45
Liability Coverage	49	45	54	50
Carrier Co-operation	61	66	67	64
	Poor/Very Poor Rating			
	<i>% of responding shippers</i>			
Equipment Supply	11	7	10	7
Equipment Condition	7	7	8	7
Service Frequency	n.a.	n.a.	7	6
Service Reliability	10	12	15	25
Transit Time	23	14	14	31
Shipment Tracing	4	7	10	14
Product Care/Cargo Handling	5	3	7	15
Claims Handling	15	13	11	8
Liability Coverage	4	3	2	-
Carrier Co-operation	7	9	3	-

Canada for all the service factors assessed. The same held true for service between Canada and the United States. Over 50 per cent of the small group of shippers using Canada-Mexico rail service indicated a favourable assessment of services received. Carrier cooperation and shipment tracing received the highest positive evaluations in all rail markets. However, over the last few years, shippers' favourable ratings of shipment tracing have been declining and, in fact, an increasing

percentage of the respondents have indicated that this factor is poor or very poor. The two service factors with the poorest rating were service reliability and transit time (Table 5.5).

Larger rail shippers gave more favourable evaluations of the various service factors. For these larger shippers, condition and supply of equipment as well as service reliability were the service factors in which, according to shipper respondents, a deterioration in rail service between 1992 and 1993 was noted.

Some shippers offered comments on their assessment of services received from rail carriers transporting their shipments; for many, the supply of rail equipment was a concern. The problem noted in the supply of box cars in 1993 was related to the railways' inability to respond to increasing demand due to insufficient equipment supply. Some shippers stated that if the 1993 equipment shortage were to continue, their plants would suffer production cutbacks or shutdowns. Rail services in eastern Canada were reported to have deteriorated significantly. Some shippers noted that information on traffic in transit was difficult to obtain.

The 1993 Shippers' Survey results indicate an increase in a poor rating for equipment supply. Indeed, the railways have rationalized their operations significantly over the last few years. However, while Table 5.5 supports claims of equipment supply problems, over half of the responding shippers indicated that they rate the supply of equipment good to very good. In fact, 90 per cent of responding shippers find the equipment supply to be either good or acceptable.

Extra-Provincial Trucking

Shippers have been placing more emphasis on services in recent years. Consequently, trucking firms have had to devote more attention to the quality of services they offer. Many approaches have been utilized by carriers to improve their services including: the addition of new routes, the expansion of the scope of services offered to users, the introduction of quality performance measures useful to both management and users, and tailoring equipment to users' needs. The interaction of trucking firms with owner-operators, freight brokers and third party logistics companies has also had an impact on the service provided.

Carriers' Views

During the Agency's Motor Carrier interviews, carriers were asked to identify their markets (i.e. intra-provincial, extra-provincial domestic and extra-provincial Canada-U.S.) and the relative importance of these markets based on total revenues. In most jurisdictions, intra-provincial trucking activities generated still a significant share of revenues for sampled carriers. A significant proportion of carrier revenue comes

from services to and from the U.S., especially for British Columbia-, Ontario- and Quebec-based trucking companies.

A large proportion of the carriers interviewed indicated that they either had expanded or were planning to expand their operations to the U.S. as a result of the north-south shift in traffic. Carriers identified two reasons for expanding their services south of the border. First, it meets customers' needs and second, it provides a trucking company with the opportunity to broaden its customer base. Carriers stated that finding backhaul traffic for a new service represents a significant challenge, more so when the new service is to the U.S. However, some carriers indicated that expanding their services or establishing a base in the U.S. positions them to take advantage of future opportunities arising from increased trade between Canada and Mexico.

Some carriers have expanded their operations by offering non-trucking services to their existing customers. For example, some trucking companies are now providing logistics services which include all activities related to planning, handling, storing and carrying goods and materials. Other carriers prefer to focus their services on a limited customer-base.

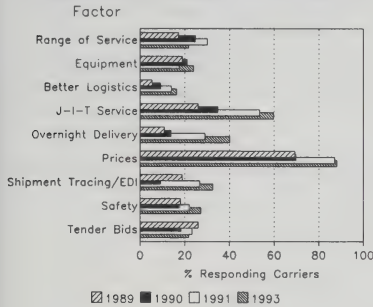
Just-in-time inventory controls, which have been adopted by many shippers and manufacturers, have forced trucking companies to place more emphasis on the reliability of their service. "Expedited" trucking is a new service that has emerged in the 1990s. Under this service, a shipper is guaranteed next morning delivery or it does not pay. Although this service commands a surcharge of up to 25 per cent, many shippers still consider it a bargain compared to air cargo rates. Within the North American marketplace, such high quality business represents an estimated \$1 billion a year in trucking business. Public utilities, sundry manufacturers, pharmaceutical suppliers, high-tech companies, and the automobile industry all rely heavily on such services for just-in-time deliveries to maintain production at a plant or to improve service to their customers. Carriers operating under such conditions must be able to deliver as scheduled. As a result, many trucking firms have invested in location-tracking devices or on-board computers which are linked to the firms' headquarters by satellite transmission.

Besides expanding the scope of their available services, trucking companies also want to improve their services. In a highly competitive environment, carriers have recognized that excellent service not only keeps clients but attracts new ones. As a result, some companies have implemented "total quality management" principles to achieve their objective.

Carriers also place adding emphasis on monitoring the quality of service received. They are keeping track of performance measures such as on-time delivery performance; on time pick-up performance; percentage of shipments with complete, accurate and on-time paperwork; damage-free

FIGURE 5.17

Service Factors Emphasized the Most
by Shippers in their Dealings with Trucking Firms



delivery; percentage of shipments with claims; claims-handling cycle time; and inquiry-response time. The most popular measure remains "on-time delivery performance", a measure used by 58 per cent of the carriers interviewed. Damage-free delivery, on-time pickup performance, and the percentage of shipments accompanied by a claim, were used by 48 per cent, 47 per cent, and 45 per cent of the carriers respectively.

During the interviews, carriers were invited to identify which factors were emphasized by shippers in 1993 (Figure 5.17). According to the carriers, "price" is still the number one priority for shippers; factors related to the delivery, such as "just-in-time" and "overnight delivery", were also important choices. "Shipment tracing/EDI capability" was also important.

Despite this emphasis on service, carrier officials who were interviewed stressed that shippers remain very sensitive to price and that shipper loyalty does not exist. Shippers are asking for more services at either the same or lower price. As a result, shippers frequently transfer their traffic to a lower-priced carrier, which may not be willing or able to maintain the service at the lower price for a sustained period of time. Yet, the rates which led to the transfer of a shipper's traffic to another carrier, very often become the standard by which traffic allocation to carriers is decided. Nevertheless, there are still some shippers who emphasize service and are prepared to pay a premium for it.

Carriers also stated that the ability to provide electronic data interchange (EDI), tracking and tracing systems, and a host of other high-tech services is becoming an increasingly important factor in attracting customers to the trucking industry.

An emerging issue identified in the 1990s is the need to gather real-time information on fleet operations. This technology is more important to carriers specialized in less-than-truckload (LTL) or in small parcel services. Some companies offer shared access to their on-line computer which allows information on shipment status and anticipated arrival to be available. For example, Maritime-Ontario, which has a direct line into CN's computers, is able to locate its containers and loads at any time of the day.

Many carriers stated that safety measures and better equipment were also rated high in shippers' priorities. These factors were of particular importance for carriers specializing in liquid bulk transport.

Shippers' Views

The Agency's 1993 Shippers' Survey allows the Agency to assess, from a user's perspective, the level of service offered by carriers in the domestic, Canada-U.S. and Canada-Mexico markets. Table 5.6 shows the overall changes noted by shippers in for-hire trucking services.

Shippers' satisfaction with the domestic and the international services is similar. Twenty-seven per cent of shippers reported an overall improvement in truckload (TL) services while 28 per cent reported an improvement in domestic and transborder LTL services. A somewhat higher proportion of shippers (31 per cent) noted an improvement in TL transborder services. As for the services between Canada and Mexico, a substantial majority of shippers did not note a change in the level of services offered a year earlier. An improvement in services in that particular market was noted by 14 per cent of TL services' users and seven per cent of LTL shippers. This could be attributed to the fact that this market is still new to both shippers and carriers.

TABLE 5.6
Overall Changes in For-Hire Trucking Services:
Shippers' Perspective 1993

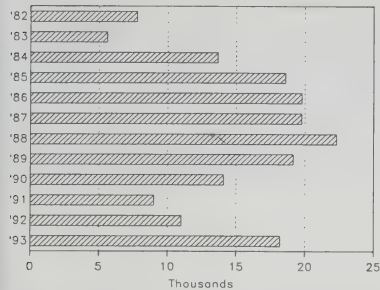
	Domestic	Canada-U.S.	Canada-Mexico
	<i>% of responding shippers</i>		
<i>Improvement</i>			
Truckload	27	31	14
LTL	28	28	7
<i>No change</i>			
Truckload	69	62	79
LTL	64	66	90
<i>Deterioration</i>			
Truckload	4	7	7
LTL	8	6	3

As was reported by carriers through the Agency's Motor Carrier Interviews, the Shippers Survey results confirmed that in TL and LTL services, the key service factors for shippers are equipment supply, equipment condition, service frequency, service reliability and transit time. Shippers rated "claims handling" as being poor from both TL and LTL operators while "shipment tracing" received a "poor" rating from many LTL shippers. No discernable differences in the rating of service factors for domestic and international services were observed.

Equipment

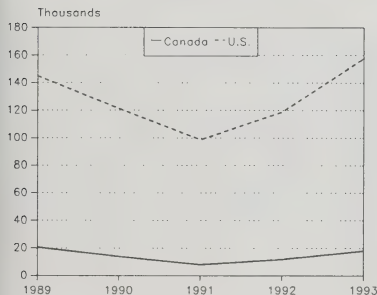
In trucking operations, as for other transportation activities, the equipment used to provide the service is very important. The type of equipment used can differentiate the service and delineate its actual quality. The Agency used registrations of new vehicles as an indirect indicator of a carrier's ability to invest in new equipment as well as an indicator of service quality. Registrations of new Class 8 vehicles (vehicles weighing more than 14,966 kilograms) almost doubled in 1993, compared to 1992; but did not quite attain the record high set in 1988

FIGURE 5.18
New Class 8 Registrations
1982 - 1993



¹ Vehicles that weigh more than 14,966 kilograms.
Source: R.L. Polk & CO. Ltd.

FIGURE 5.19
Equipment Sales



(Figure 5.18). Table 5.7 shows the new Class 8 Registrations in Canada.

TABLE 5.7
New Class 8¹ Registrations in Canada, By Province
1992 - 1993

	1992	1993
Nfld.	65	77
P.E.I.	30	59
N.S.	202	470
N.B.	397	804
Quebec	2,287	3,841
Ontario	4,169	6,378
Manitoba	336	595
Sask.	435	632
Alberta	1,845	3,376
B.C.	1,226	1,968
TOTAL	10,992	18,200

¹ Vehicles weighing more than 14,966 kilograms.
Source: R.L. Polk & CO. Ltd.

Registrations increased in all provinces. The increase in registrations observed in 1993 may be attributable, in part, to the fact that trucking companies had postponed decisions to replace old equipment during the recession as a cost control measure and that 53-foot trailers are now accepted across Canada. In fact, the demand for this type of equipment was so strong during the last quarter of 1993 that equipment manufacturers experienced difficulty in producing enough units to meet the orders that were being placed. Figure 5.19 shows that the trend in equipment purchasing in Canada is similar to the one in the U.S.

Many senior motor carrier officials indicated during the interviews, that some changes had been made to their truck fleet in 1993. Seventy per cent of the interviewees indicated that their company had acquired new tractors in 1993. This compares to less than 50 per cent and 55 per cent of the carriers in 1991 and 1990 respectively. Carriers were looking for more fuel efficient equipment to enhance their fleet's productivity in 1993.

Based on feed-back from the Agency's motor carrier interviews, the tendency observed in other transportation sectors to utilize leased equipment during hard economic times did not materialize. Seventy-six

per cent of the carriers interviewed had not leased any tractors in their fleet while ten per cent had fewer than ten leased tractors.

A major truck-and-trailer leasing company, Provincial Trailer Rentals (PTR), is establishing Canada's first pool of domestic containers to tap the intermodal freight leasing market. The initial pool will consist of 1,000 containers for lease and rental to railways, private fleets and for-hire trucking firms throughout Canada and the northeastern U.S. PTR is the trailer leasing division of transportation group Hendrie Corp.

Freight Brokers

The percentage of carriers using freight brokers went down only marginally, from 65 per cent in 1991 to 61 per cent in 1993. Fewer carriers are using them in domestic operations while more carriers have turned to freight brokers in international services, a situation explained by the fact that more Canadian trucking firms are penetrating the U.S. market. Carriers often use brokers to find backhaul loads in these new markets. Three-quarters of the carriers interviewed use freight brokers for backhaul trips only.

Over three quarters of the Quebec- and British Columbia-based carriers covered by the Agency's interview program reported using the services of freight brokers.

Fewer than half of the shippers surveyed (42 per cent) stated that their company used the services of freight brokers in 1993.

Forty-two per cent of the carriers interviewed indicated that their firms had received traffic from third-party logistics companies in 1993. Such companies provide several specialized combined logistics services (e.g. storage, transportation, and inventory management) to manufacturers and their customers. From the interviews, it was mostly large carriers based in Ontario and Manitoba who dealt with such companies. Over three-quarters of the carriers who specialized in LTL services dealt with such companies, compared to less than half of those specialized in TL services.

Marine

International Liner Trade

Service levels in the international liner trade are measured by the number of carriers offering services on a given trade route, the frequency of vessel calls, the capacity available to shippers, and the transit times to outbound destinations.

Conference liner services declined appreciably in 1993 but were replaced by independents.

Number of Lines Serving Canada

On both the east and west coasts of Canada, the number of conference lines serving the major trade routes to U.K./Europe, the Far East and Australia declined appreciably in 1993. In contrast, the ranks of independent operators showed a corresponding increase. On the west coast, the combined total has remained relatively stable in recent years between 31 and 34 lines, but on the east coast, both conference and independent services have dropped from 50 in 1988 to 37 in 1993.

TABLE 5.8
Lines Serving Canada in 1993 on Trade Routes to Europe, the Far East and Australia¹

Western Canada	Conf.	Non-Conf.	Total ²	Eastern Canada	Conf.	Non-Conf.	Total ¹
Calling Western Canada	8	17	23	Calling Eastern Canada	11	16	22
Calling Western U.S.	5	6	10	Calling Eastern U.S.	7	11	16
Mini-landbridge	2	3	4	Mini-landbridge	7	8	13
Total²	12	22	31	Total²	19	30	37

¹ Excludes forest products carriers who do not advertise a scheduled service.

² Some lines serve more than one route and/or offer both conference and non-conference services; double counting has been eliminated in the totals.

Survey of Freight Forwarders

The majority of responding forwarders (77 per cent) cited rates as the most important factor in their selection of a shipping line, followed by space availability and frequency of sailings mentioned by 49 and 43 per cent of forwarders, respectively. This varies slightly from the previous year when 90 per cent of responding forwarders named rates as the number one factor in their selection, followed by overall service and frequency of sailings by 46 and 45 per cent, respectively.

When asked about the nature of changes in conference liner services, the majority of respondents considered that the number of available carriers, the frequency of service, transit times and space availability had not changed from 1992 to 1993. However, over half of responding freight forwarders reported that their ocean freight rates had increased in 1993 — results similar to those reported in 1992.

Conference shipping services were rated reasonable to good by a very large majority of respondents (95 per cent) while non-conference services were rated reasonable to good by a slightly lower majority of 86 per cent.

Service Frequencies

Non-conference services to U.K./European markets jumped sharply in 1993.

On the east coast-Europe route, the number of conference lines offering multiple services increased between 1990 and 1992, while the number of weekly services offered by non-conference lines declined. Even so, ACL dropped its slot charter arrangement on CanMar/OOCL vessels out of Montreal in 1993; the conference offerings declined slightly although the number of weekly non-conference services jumped sharply.

On the western Canada-U.K./Continent route, landbridge services have grown in importance relative to the all-water route. The disbanding of the ACL/CGM/Hapag LLOYD service left no all-water conference service on the route. On the route to the Mediterranean market, only the d'Amico-Italia Line joint service remains as a conference listing.

TABLE 5.9
Service Frequencies, 1993

Trade Route	Conference Lines				Non-Conference Lines			
	Wkly	8-14 Days	15-21 Days	Mthly	Wkly	8-14 Days	15-21 Days	Mthly
Western Canada-U.K./Continent (including Mediterranean)	- (4)	-	1	-	3 (4)	1 (1)	1	1
Eastern Canada-U.K./Continent (including Mediterranean)	11	1	-	-	11	6	3	1
Western Canada-Far East	13	-	-	-	8	2	1	2
Eastern Canada-Far East	5 (28)	-	-	-	4 (9)	3	3	-
Western Canada-Australasia	-	3	-	1	4	1	-	6
Eastern Canada-Australasia	-	2	2	-	1 (2)	2 (1)	1	-

Note: Landbridge service frequencies shown in parentheses ().

Conference carriers offered more frequent connections to the Far East, especially in Landbridge services.

On the western Canada-Far East route, conference carriers have consistently offered a much larger number of weekly sailings than independent operators. The same is true for the eastern Canada-Far East route; however, landbridge services account for the bulk of the weekly offerings. The spectacular growth in conference landbridge services to the Far East reflects the trend towards strategic alliances and multiple service loops on the Pacific trades. Competition on service frequency can produce multiple calls by a single line at a given port. NYK, for

example, has three services calling at Vancouver on a weekly basis but serving different port rotations in the Far East.

Conference carriers providing direct services to Australia rarely offer weekly sailings due to the length of haul and lower volumes of cargo; however, services offered as add-on feeders to weekly mainline services to the Far East increased somewhat in 1993 after declining the year before.

Transit Times

Since 1987, transit times have improved for most transpacific destinations, with the exception of South Korea. The improvements have been particularly notable for Taiwan and Singapore due to the increase in direct calls at their ports. Transit times on the eastern Canada-Far East routes were relatively consistent during this period.

Shippers' Survey

Over half of all respondents to the Survey indicated that they use marine transport for outbound shipments, with those shipping to off-shore markets about double those shipping to domestic and North American markets. Over 40 per cent of all respondents receive inbound cargo by water, in most cases from off-shore sources.

For marine shipments in domestic and North American markets, shippers tended to deal directly with carriers in making their transportation arrangements; however, for off-shore movements, the majority of shippers used freight forwarders or specialized logistics firms.

Overall, respondents experienced no significant changes in marine services in domestic, Canada-U.S., or Canada-Mexico trade; for other international marine services, 16 per cent experienced minor or significant improvements.

In rating service factors experienced in 1993, for domestic services shippers gave high marks to Equipment Supply, Equipment Condition, Service Reliability, Product Care/Cargo Handling, Liability Coverage, and Carrier Cooperation. Some respondents noted dissatisfaction with Service Frequency, Transit Time and Shipment Tracing. For Canada-U.S. services, shippers also gave high marks to Equipment Supply, Equipment Condition, Product Care/Cargo Handling, and Carrier Cooperation, and noted improvements over 1992 in Equipment Supply, Service Frequency, Shipment Tracing and Product Care/Cargo Handling. For Canada-Mexico services, response rates were insufficient to draw conclusions. For international (off-shore) services, shippers gave the highest ranking to Equipment Supply, Product Care/Cargo Handling, and Carrier Cooperation, noting improvements over 1992 in Equipment Supply, Equipment Condition, Service Frequency, Service Reliability, Transit Time, Shipment Tracing and Carrier Cooperation. Some shippers still were dissatisfied with Transit Time.

Slightly more than half of the shippers controlling the movement of their own general cargo assigned it to conference rather than non-conference carriers. The use of intermodal services for international (off-shore) shipments involved truck-marine in 45 per cent of cases reported, truck-rail-marine in 34 per cent, and rail-marine in 21 per cent.

On the eastern Canada-U.K./Continent routing, average transit times are slightly higher in 1993 than in 1987; however, there is not enough of a differential to indicate a significant trend. On the western Canada-U.K./Continent route, the dissolution of the conference on the route disrupts the pattern, and only non-conference times are available for 1993.

Transit times on transpacific routes have improved, particularly for Taiwan and Singapore.

TABLE 5.10

Shortest Outbound Transit Times, 1993 (days)

(not including landbridge services)

Trade Route/ Country	Conf.	Non- Conf.	Trade Route/ Country	Conf.	Non- Conf.
Western Canada-U.K./Continent			Eastern Canada-U.K./Continent		
United Kingdom	-	26	United Kingdom	8	9
Germany	-	28	Germany	8	10
Netherlands	-	27	Netherlands	11	11
Belgium	-	27	Belgium	10	8
France	-	25	France	10	15
Scandinavia	-	30	Scandinavia	15	21
Spain	33	27	Spain	9	16
Italy	35	31	Italy	12	13
Western Canada-Far East			Eastern Canada-Far East		
Japan	10	10	Japan	26	32
South Korea	18	17	South Korea	29	40
Taiwan	12	13	Taiwan	28	32
Hong Kong	15	16	Hong Kong	30	35
Singapore	19	19	Singapore	22	32
Western Canada-Australasia			Eastern Canada-Australasia		
Australia	24	19	Australia	28	39
New Zealand	22	35	New Zealand	28	39

Port Services

Port of Vancouver

The planned \$220-million container terminal at Roberts Bank, Deltaport, with a projected annual throughput capacity of up to 500,000 TEU's received the federal government approval in 1993 and is expected to be in operation in late 1996. The new facilities will nearly double the

Improvements at the Port of Vancouver will improve the handling of containerized, bulk and general cargoes.

current container-handling capacity at Vancouver, which is expected to be operating at capacity by the time the new terminal is completed.

With new contracts doubling its pulp handling requirements, Lynnterm forest products terminal in North Vancouver is undertaking a \$4.7-million expansion, enabling it to berth four ships simultaneously. A third storage shed of 225,000 square feet was completed in 1993.

Vanterm ordered a second 50-ton post-Panamax container crane from China for delivery in early 1994 at a cost of \$6.7 million. The first was installed in 1992. This will enable Vanterm to handle two post-Panamax vessels simultaneously.

Ballantyne Terminal will be rebuilt as a combination forest products/cruiseship facility at a cost of \$40 million. The project, to be completed by the end of 1995, will provide additional terminal throughput of 385,000 tonnes of pulp and 50,000 tonnes of general cargo annually.

Vancouver Wharves, one of the largest deep-sea bulk handling facilities on the coast, has been bought by BC Rail. Planned investments of \$5 million over the next few years will begin with improvements to rail car unloading systems and upgrading the inbound concentrate handling systems.

Neptune Bulk Terminals opened a second covered storage shed for potash with a fully automated stacker/reclaimer. Capacity is 100,000 tonnes.

Port of Montreal

Port access and navigation were enhanced at Montreal.

In 1993, the Coast Guard's dredging project on the St. Lawrence River was completed. By deepening the shipping channel from 35 to 36 feet, larger vessels can carry an additional 120 TEUs or 1,000 tonnes of cargo.

The port has worked closely with the Coast Guard to improve winter navigation after severe ice conditions caused disruption at the Port for 27 days in February, 1993. A satellite navigation system is being tested at Montreal in collaboration with the Coast Guard and Canadian Hydrographic Services.

Cast Terminal Inc. has added a mobile harbour crane to its equipment. This addition will reduce turnaround time for Cast's fleet of conbulklers from three to two days and increase heavy lift capabilities.

The Port's subsidiary that operated the Contrecoeur terminal has been sold to Logistec Corporation. At other facilities, regular and routine maintenance of infrastructure proceeded following a period of expansion at the Port's principal container terminals.

Canadian ports offer a variety of multipurpose and specialized facilities.

TABLE 5.11
Profile of Major Canadian Ports

	Rail Access	Deepwater Approach	Cargo Handling Terminals by Type				
			Container	General Cargo	Dry Bulk	Liquid Bulk	Ro-Ro Facilities
LOCAL PORT CORPORATIONS							
Vancouver	BCR, CN, CP, BN	Yes	2	8	12	6	Yes
Halifax	CN	Yes	2	6	2	3	Yes
Montreal	CN, CP	No	5	11	9	13	Yes
Prince Rupert	CN	Yes	-	2	2	-	Yes
Quebec	CN, CP	Yes	-	3	4	2	Yes
Saint John	CN, CAR	No	1	8	2	3	Yes
St. John's	None	No	1	4	1	4	Yes
CANADA PORT CORPORATION - divisional ports							
Belledune	CN	Yes	-	-	1	-	No
Churchill	CN	No	-	1	1	-	No
Port Colborne	CN, CP	Seaway	-	-	1	-	No
Saguenay	None	No	-	1	-	1	No
Prescott	CN, CP	Seaway	-	-	2	1	No
Sept-Îles	QN&L	Yes	3	3	3	1	Yes
Trois-Rivières	CP	No	1	1	3	3	Yes
HARBOUR COMMISSIONS							
Fraser Port	CN, CP, BN, SRY	No	1	3	1	1	Yes
Nanaimo	EN	No	-	4	-	1	Yes
Port Alberni	EN	Yes	-	2	-	-	No
Thunder Bay	CN, CP	Seaway	-	1	12	4	No
Toronto	CN, CP	Seaway	-	1	12	2	Yes
Windsor	CN, CP, Essex	Seaway	-	2	9	1	Yes
Hamilton	CN	Seaway	-	2	10	-	Yes
Oshawa	CN, CP	Seaway	-	1	1	-	Yes

Port of Halifax

Intermodal handling capability was boosted at Halifax.

The Port of Halifax, located on the Great Circle Route over the North Atlantic, is the closest North American mainland port to Europe. Enhanced port productivity (including the improved economics attributable to CN's new double stack service and new long-term labour

agreements) brought about the return of Atlantic Container Line (ACL) to Halifax. CN Halifax Intermodal Terminal began operation in late November offering double stack container service direct to Montreal, Toronto, and through to Chicago. The double stack rail service replaces the motor carrier and single stack operations between Halifax and Moncton.

HALTERM installed an additional gantry crane to provide a higher level of service and faster turn-around time for containerhips, which provide Halifax with a quarter of its business.

The electronic data interchange system, EDIPORT, is continuing to replace paper documentation, improving efficiencies and providing technological advances not generally found at other ports on the North Atlantic. Growth in message transfers is reducing the unit costs to users.

Port Terminal Operators

According to the Agency's 1993 Survey of Port Terminal Operators, more operators handled freight moving via a "truck/marine" combination. However, when transporting overseas freight to and from their terminals, over 50 per cent of terminal operator respondents reported that the modal combination of rail/marine was used most often, followed closely by a truck/marine combination.

Over 50 per cent of the operators also felt that rail services to and from their terminal facilities had not changed in 1993 compared to 1992. The remainder were evenly divided in their assessments of improved or deteriorated Canadian rail services.

Port terminal operators were complimentary about rail equipment condition, product care/cargo handling, carrier cooperation and overall quality of service. The railways obtained good ratings from over 50 per cent of the respondents on these four service factors. A majority of operators rated service frequency and service reliability by rail carriers serving their terminal as acceptable. However, their assessment of equipment supply, switching services, and transit time was less positive. Compared to other service factors, these were considered poor by the largest proportion of operators.

The survey was also used to gain a picture of the willingness of Canadian rail carriers to compete with each other or against other modes for traffic moving through terminal facilities in 1993. The majority of terminal operators surveyed indicated that the railways were just as interested in competing for this traffic as in 1992. Specifically, 56 per cent indicated that the railways were "interested" competing for traffic although 28 per cent said they were indifferent and 16 per cent noted no interest at all.

Liner services were highly rated in 1993; trucking services were also highly rated, but had slipped somewhat from 1992. Railway ratings were mixed.

TABLE 5.12
Port Terminal Operator Assessment of Service Factors

	1993			1992		
	Very Good/Good	Acceptable	Poor/Very Poor	Very Good/Good	Acceptable	Poor/Very Poor
<i>percentage of respondents</i>						
Rail Services						
Equipment Supply	45	29	26	52	31	17
Equipment Condition	55	42	3	56	37	7
Switching Services	38	41	21	35	37	28
Service Frequency	42	52	6	n.a.	n.a.	n.a.
Service Reliability	38	50	12	41	39	20
Transit Time	43	37	20	40	48	12
Product Care	55	42	3	n.a.	n.a.	n.a.
Carrier Cooperation	51	40	9	51	40	9
Quality of Service	51	34	14	43	50	7
Efficiency of Service	44	41	15	36	50	14
Truckload Services						
Equipment Supply	72	28	-	81	17	2
Equipment Condition	55	42	3	75	23	2
Service Frequency	77	23	-	78	20	2
Service Reliability	63	34	3	n.a.	n.a.	n.a.
Transit Time	71	29	-	78	20	2
Product Care	67	33	-	n.a.	n.a.	n.a.
Carrier Cooperation	81	19	-	88	12	0
Quality of Service	77	23	-	78	22	0
Efficiency of Service	67	33	-	74	26	0
Conference Liner Services						
Import	80	15	5	63	33	4
Export	71	29	-	59	33	7
Non-Conference Liner Services						
Import	80	12	8	66	31	3
Export	69	24	7	66	31	3

Some respondents indicated dissatisfaction with rail rates and competitive rail access to their terminals.

Port terminal operators were asked to assess certain factors with respect to freight movements by rail to and from their terminal facilities. Close to one-quarter of the respondents indicated poor or very poor rail rates as well as poor competitive rail access to the terminal. Rail service levels were rated either acceptable or good by 85 per cent of the terminal operator respondents.

Liner services were rated higher for import traffic than for exports.

Conference and non-conference liner services were generally rated as good for both export and import activities. Ratings of import liner services centred in the "acceptable" to "very good" range, with almost two-thirds of the responses indicating them as "good". Export liner services were also rated as "good" by slightly more than half of the responding PTOs, with a substantial number ranking them lower at the acceptable level. This pattern held for both conference and non-conference liner services.

Although pleased with overall port terminal operations, some operators noted minor deterioration in switching services due to the railways cost-cutting measures, thus resulting in delays in pick-up and delivery of empty unit trains. Another factor contributing to service problems was lack of communication between CN and CP Rail.

Rail services to the port of Churchill were rated as very poor with little interest in operation or service of this line. One Newfoundland operator noted that the main rail link from Truro to North Sydney, N.S., sold to RailTex, impacts on Newfoundland traffic.

Some operators were concerned with problems over equipment availability to service certain trades. A shortage of hopper cars was noted. Rail service to privately owned grain terminals in 1993 was reported as poor, largely caused by rail car shortages.

In future, some terminal operators believe they will be required to provide more extensive services and specialized storage/handling facilities to handle the changing requirements of customers.

Northern Marine Resupply Services

Mackenzie System

There were no major changes in northern marine resupply services in 1993 ...

Since 1988, marine resupply services in the Mackenzie system have remained relatively stable in terms of the number of carriers, licensed fleet tonnages, and communities served. In 1993, Northern Transportation Company Limited, the principal carrier, provided scheduled service to 25 communities on Great Slave Lake, along the Mackenzie River and in the western Arctic. Excluding its main staging and transshipment points at Hay River, Norman Wells, Inuvik and Tuktoyaktuk, the carrier made a total of 50 calls, including 12 to points on Great Slave Lake, 19 to Mackenzie River settlements, five in the Mackenzie delta, and 14 to communities in the western Arctic. Cooper

Barging Service Ltd.'s non-scheduled operations included ten calls at Wrigley, six at both Fort Norman and Norman Wells, and one at Jean Marie River. Coastal Marine Ltd. operated 11 trips from its Inuvik base to Tuktoyaktuk, Aklavik and other points in the delta, forwarding cargo trucked in via the Dempster highway. The other small licensed carrier, Beluga Transportation Ltd., did not operate in 1993.

Survey of Northern Marine Resupply Users

Most respondents to the survey rated marine resupply services in 1993 about the same as in the previous year; however, one third of Athabasca and eastern Arctic users indicated that services had improved.

User Rankings of the Importance of Price/Service Factors, 1993

Service Factor	Mackenzie/ Western Arctic	Eastern Arctic	Lake Athabasca
Frequency	5	6	2
Prices/Rates	1	1	1
Schedule	3	4	3
Flexibility	4	5	5
On-time Performance	2	2	4
Loss & Damage/ Payment of Claims	6	3	6

Users of resupply services in the Mackenzie/western Arctic and Athabasca systems expressed a high degree of satisfaction with all of the major price/service factors, with over 80 per cent of responses in the "acceptable" or "good" range. Ratings were even higher for eastern Arctic services, with the exception of the Loss & Damage/Payment of Claims category, where 20 per cent considered the service "poor".

Athabasca System

In the Athabasca system, the principal carrier, A. Frame Contracting Ltd., made nine trips out of Fort McMurray, calling at Fort Chipewyan, Uranium City, Fond du Lac, and Stony Rapids. The carrier also operated one trip from Hay River to Yellowknife on Great Slave Lake. Lake Athabasca Transport reported smaller-scale non-scheduled operations in and around Fort Chipewyan. No information was available on the 1993 operating of MacDonald Marine Transport Limited. Gerard Barging operated a scheduled weekly service between Fort McMurray and Fort Chipewyan with a 10 to 12 hour turnaround time, but did not serve the Saskatchewan side of the lake.

Keewatin

Scheduled resupply services out of Churchill remained stable in 1993. NTCL made 11 sailings between July and early October. Communities served were Arviat, Whale Cove, Rankin Inlet, Chesterfield Inlet, Baker Lake, and Coral Harbour.

Eastern Arctic Sealift

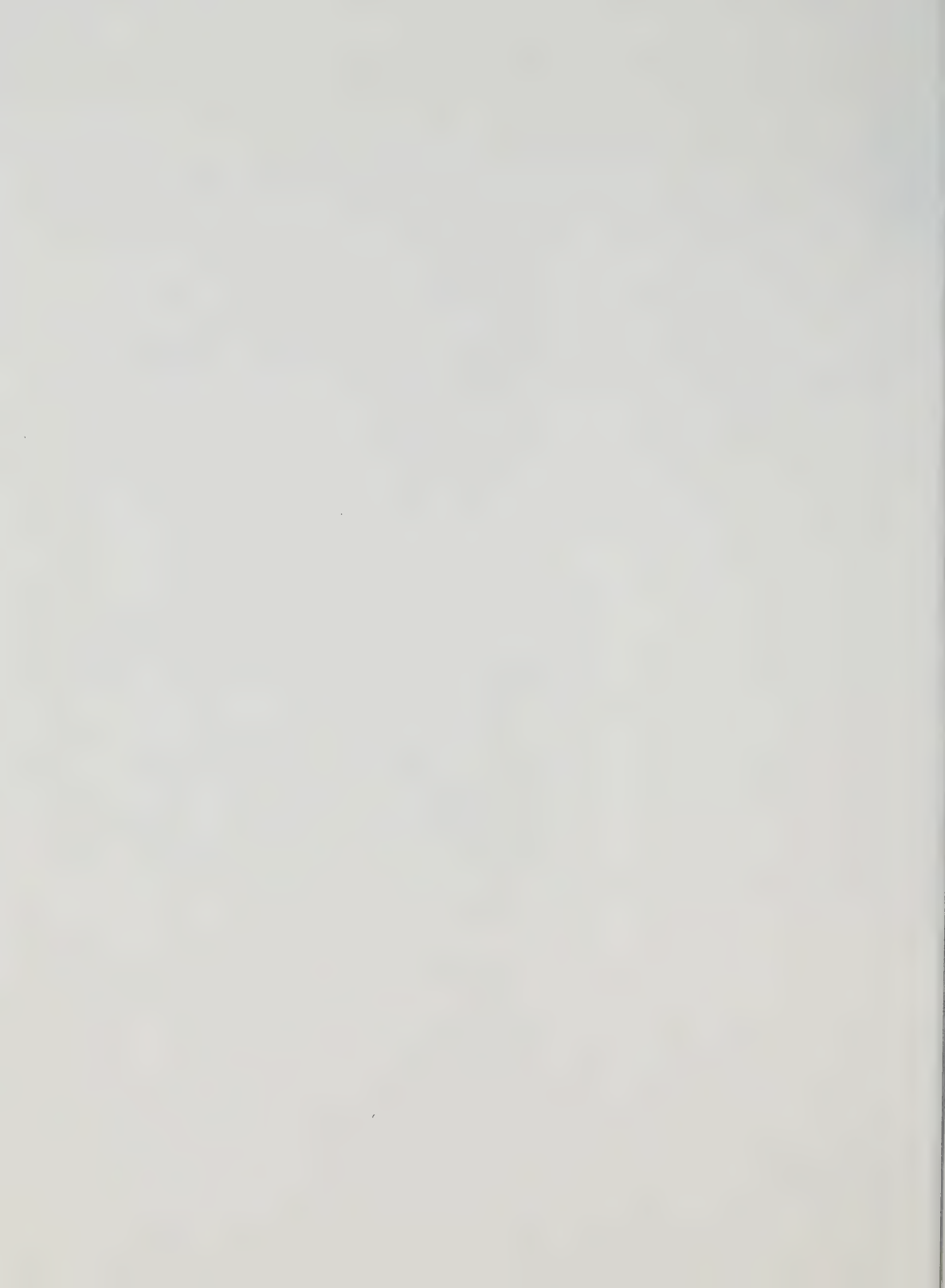
Under the overall coordination of Coast Guard Northern, the 1993 Sealift employed four dry cargo carriers and one bulk petroleum carrier. Fourteen sailings were made during the July to October period. Supplies were delivered to some 28 sites and communities in Hudson Strait and Cumberland Sound, Foxe Basin, East Baffin, the mid and high Arctic, and Greenland. Only one tanker was contracted in 1993, since eleven eastern Arctic villages were supplied with fuel oil by two European tankers under separate contract to the Government of the Northwest Territories.

*... except for the contracting
out of bulk fuel supply in the
eastern Arctic.*

Total Quality Management

For the first time, this year's Agency's Shippers Survey included a new section on "Total Quality Management" (TQM). Shippers were asked if they were using some form of total quality management in 1993 and whether or not it was used to evaluate carriers' performance.

Many firms have introduced variations of TQM, continuous improvement, or self-managing inter-disciplinary teams to their workplace. Such initiatives were undertaken to eliminate or reduce hierarchy, improve service to customers, become more competitive and remain profitable. Forty per cent of the shippers who responded to this year's survey said that they had put in place some TQM processes in 1993, and almost half were using TQM to evaluate the performance of their carriers.



TRANSPORTATION DEMAND

Highlights of 1993

In general, the demand for transport services improved slightly in 1993, stimulated by increased exports. Passenger demand remained stagnant.

Air

Air cargo traffic increased by 4.2 per cent in the first three quarters of the year, bolstered by larger increases in transborder and international traffic. On the passenger side, the two major airlines carried fewer passengers. International travel was stronger than domestic.

Rail

Class I and Class II railways recorded an increase of 1.1 per cent in their total tonnage moved. Rail transport of coal, and wood products (including lumber) while transport of grain, iron ore and concentrates, potash, and sulphur decreased. Intermodal traffic went up.

Trucking

Growth occurred in specialized niche trucking markets and the United States-Canada flow of goods benefitted truckers.

Marine

Marine exports continued to decline, offset somewhat by growth in import traffic. The downward trend in both international and domestic marine traffic continued in the first three quarters of 1993.

Introduction

Transportation is essential in a country as vast as Canada. Except for the corridor between Québec City and Windsor, where population and economic activities are relatively dense, populated areas are far apart. Furthermore, an important part of Canada's economic activity comes from its international trade.

Each transportation mode possesses a specific niche in the transportation market. Marine is the largest carrier of tonnages but trucking is three times as big in value. For long overland hauls, rail achieves major efficiencies. Because of its speed, air travel is the preferred mode for most business and long-distance travel.

Demand for transportation services is derived from other activities. The choice of service used is based on considerations such as the specific characteristics of the commodity, the relative cost of transportation services in the retail price of the commodity, the range of services offered, and others.

In recent years, helped by new technology, each mode has gained efficiency. This has not only improved services, but also helped lower the cost of providing them. In 1993, the Government of Canada imposed a moratorium on shipments of grain to Russia, the North American Free Trade Agreement was signed, and the recession ended.

This section looks at the demand for transportation services and, wherever possible, identifies the source of that demand and the commodities involved. Emphasis is placed on rail, truck, and marine freight movements while for air services, which derives most of its business from passenger, the section addresses both cargo and passenger demand.

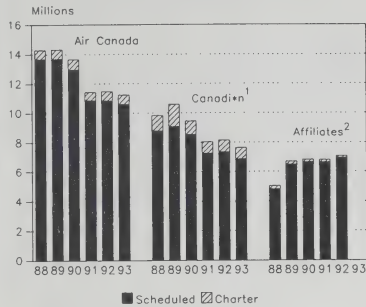
Demand for Passenger Transport Services - Air

Contrary to other modes of transportation reported in this section, a significant portion of the demand for air transportation services stems from passenger.

Passenger traffic of the major scheduled carriers declined slightly in 1993.

Air Canada and Canadi*n carried a combined 17.5 million passengers on scheduled services in 1993, down 3.8 per cent from 1992. Revenue passenger-kilometres (RPKs) were also down by two per cent to 40.4 billion. This figure represents a drop of 13.7 per cent from the 1989 peak of 46.8 billion for all the major scheduled carriers: Air Canada, Canadi*n and Wardair.

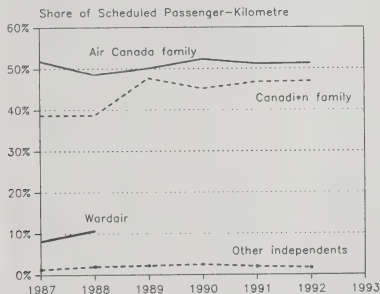
FIGURE 6.1
Number of Passengers Carried



¹ Includes Wardair in 1989.

² Includes Air Atlantic, Calm Air, Canadi*n Regional (Canadian Partner and Time Air) and Inter-Canadien.

FIGURE 6.2
Market Share
Scheduled Revenue Passenger-Kilometres



*Scheduled traffic on the top
25 domestic city-pairs
declined over 1992.*

TABLE 6.1
Scheduled Passenger Traffic

	Passengers		Passenger-Kilometres	
	1993 (000's)	% Change from 1992	1993 (000,000's)	% Change from 1992
Air Canada	10,665	(2.1)	20,491	(4.5)
Canadi*n	6,852	(6.8)	19,935	0.6
Air Canada Connectors ¹	3,748	(2.4)	1,671	(0.8)
Canadian Partners ^{2,3}	2,246	(2.7)	1,023	(1.4)

Notes: () Indicates negative figures.

¹ Includes Air Alliance, AirBC, Air Nova, Air Ontario and NWT Air.

² Includes Air Atlantic, Calm Air, Canadi*n Regional (Canadian Partner and Time Air) and Inter-Canadien.

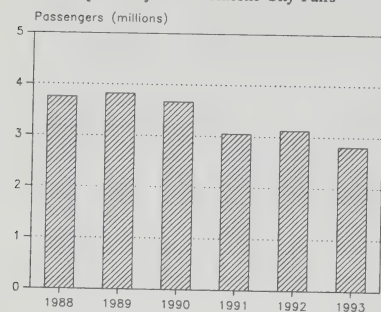
³ First 9 months' data only.

The volume of traffic carried by Canadi*n in 1993 reflects changes to services introduced by the carrier over the year. Service was reduced on several short-haul city-pairs including Toronto-Ottawa and Montreal, Calgary-Edmonton and Calgary-Vancouver. Combined with an increase in long-haul services, the result is a reduction in passengers and an increase in RPKs. Air Canada and its affiliates focused more on several transborder markets, including Houston, as can be seen in the reported results.

The affiliated airlines carried fewer passengers in 1993 compared to 1992, but registered an increase in revenue passenger-kilometres of 2.1 per cent, indicating that they flew longer distances.

During the first six months of 1993, five million passengers travelled by air in Canada, a decline of 10.9 per cent over the corresponding period in 1992. Most of the top 25 domestic city-pairs posted declines in passenger traffic, resulting in a combined decrease of 9.4 per cent. Of significance was the growth reported by the Calgary-Edmonton, Prince George-Vancouver and Kelowna-Vancouver markets, the only ones that did so among the top 25.

FIGURE 6.3
Passengers on Scheduled Services,
Top Twenty-Five Domestic City-Pairs



Figures are for January to June.

TABLE 6.2

Passengers Carried on Scheduled Services - Top Twenty-Five Domestic City-Pairs, January to June 1993

City-pair	1993 Passengers	% Increase (Decrease) from 1992
Montreal-Toronto	561,290	(1.8)
Ottawa-Toronto	320,860	(8.6)
Toronto-Vancouver	242,800	(19.2)
Calgary-Vancouver	162,580	(15.3)
Calgary-Toronto	147,100	(11.1)
Edmonton-Vancouver	136,070	(3.8)
Calgary-Edmonton	135,220	7.1
Halifax-Toronto	116,980	(9.6)
Toronto-Winnipeg	116,550	(17.1)
Edmonton-Toronto	95,300	(11.5)
Thunder Bay-Toronto	79,000	(14.5)
Montreal-Vancouver	67,510	(24.4)
Ottawa-Vancouver	65,700	(8.9)
Vancouver-Victoria	64,740	(5.5)
Prince George-Vancouver	57,530	5.1
Vancouver-Winnipeg	55,860	(25.6)
Calgary-Winnipeg	52,560	(9.3)
Halifax-Ottawa	46,260	(10.1)
Ottawa-Winnipeg	44,990	(4.7)
Kelowna-Vancouver	44,630	0.7
Halifax-Montreal	42,140	(23.2)
Calgary-Montreal	41,930	(3.9)
St. John's-Toronto	41,470	(18.4)
Quebec-Toronto	39,750	(4.4)
Calgary-Ottawa	37,070	(7.4)
TOTAL (Top 25)	2,815,890	(9.4)
TOTAL (all city pairs)	5,043,420	(10.9)

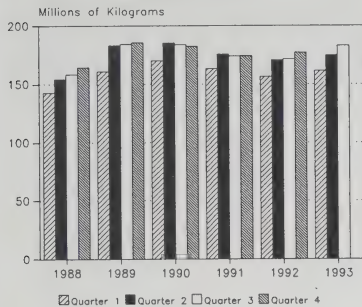
Demand for Freight Transport Services - Air

Air Cargo Demand

Cargo volume improved for both the airports and the major scheduled airlines.

For the first three quarters of 1993, the volume of cargo handled on major scheduled services at Canadian airports totalled 519.4 million kilograms, up 4.2 per cent from 1992 but still down from the 1990 peak of 539.6 million kilograms. Domestic air cargo increased by 0.4 per cent over the same period in 1992, but it accounted for a smaller share

FIGURE 6.4
Cargo Handled on Scheduled Services
at Canadian Airports



of the total (51.0 per cent versus 52.9 per cent in 1992 and 54.6 per cent in 1991). Transborder cargo (15.6 per cent of the total) and other international cargo (33.4 per cent of the total) grew by 6.9 and 9.0 per cent, respectively.

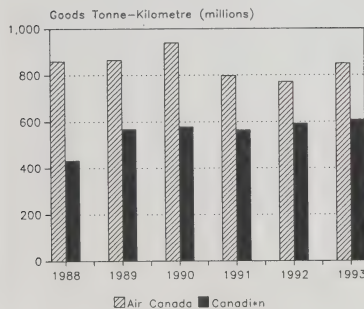
The top six airports, representing 90 per cent of cargo volume, all registered increases, for example, Toronto Pearson Airport (up 7.2 per cent) and Vancouver International Airport (up 7.9 per cent). Halifax, Edmonton and Ottawa International Airports posted declines of 14.5 per cent, 3.1 per cent and 18.6 per cent, respectively.

Hamilton's Mount Hope Airport became a significant cargo centre in the second quarter of 1993. For the period January-September, it handled over three-quarters of a million kilograms of air cargo, ranking it fifteenth in cargo volume.

TABLE 6.3
Scheduled Cargo Traffic, January to September

	Tonnes		Goods Tonne-Kilometres	
	1993	% Change from 1992	1993 (000's)	% Change from 1992
Air Canada	249,867	7.4	849,734	10.1
Canadi*n	163,219	7.5	606,863	2.4

FIGURE 6.5
Scheduled Cargo Traffic



Air Canada carried 60 per cent of the scheduled cargo traffic in 1993, unchanged from 1992 but down from 64 per cent in 1991. Both Air Canada and Canadi*n posted gains of over seven per cent in the volume of cargo carried over the first nine months of the year, but Air Canada produced 10.1 per cent more goods tonne-kilometres in 1993 compared to the same period in 1992. This suggests Air Canada was making strong gains in the long-haul markets and is consistent with the reported good response to the Vancouver-London-New Delhi combi service. Canadi*n's goods tonne-kilometres increased at a slower pace than its volume, suggesting a traffic shift to its short-haul (domestic) overnight service, flown with B-737 freighters.

Northern Air Cargo

Northern and remote communities are more dependent on air cargo services than southern communities. As a result, 12 of the top 30 Canadian airports, ranked by volume of cargo handled on scheduled services, are in the North i.e., Yellowknife, Iqaluit, Goose Bay, Whitehorse, Norman Wells, Kuujuaq, Resolute Bay, Inuvik, Nanisivik, Kuujuaq, Wabush and Cambridge Bay.

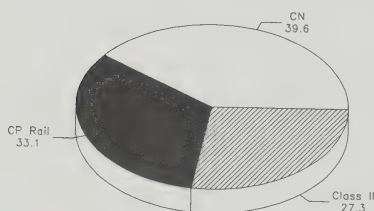
The volume of cargo handled by northern airports dropped sharply in 1993.

Total cargo handled at Northern airports during the first nine months of 1993 declined 24.2 per cent compared to the same period in 1992. The cargo traffic at the three largest centres — Yellowknife, Iqaluit and Goose Bay — declined by 18.1, 23.3 and 56.2 per cent, respectively, compared to the same period in 1992. The only centre to benefit from a cargo traffic increase was Wabush, which posted a healthy 25.5 per cent increase.

Demand for Freight Transport Services - Rail

Rail Domestic Traffic

FIGURE 6.6
Distribution of 1993 Domestic Rail Traffic Carried

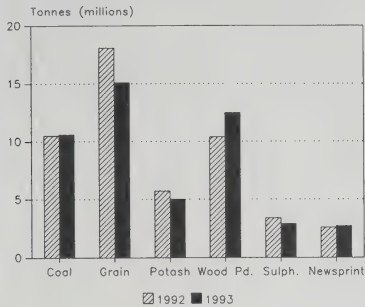
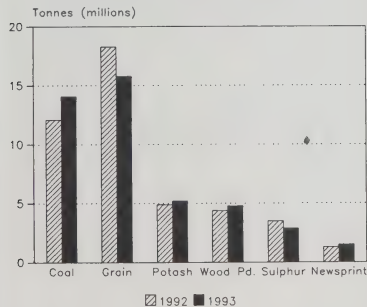


In 1993, total carload traffic loaded on Class I and Class II railways in Canada amounted to 224.4 million metric tonnes, a slight increase of 0.2 per cent over the previous year. This total excludes non-carload traffic loaded and receipts from United States connections. When taken into account with total Canadian carload traffic, a total of 238.9 million metric tonnes of traffic were carried. This represents an increase of 1.1 per cent from 1992 or 2.5 million tonnes. The proportion of tonnage carried by Canada's two major railways, along with Class II railway's share, is shown in Figure 6.6 for 1993. Wheat shipments declined sharply to 24 per cent in 1993, as sales to Russia dropped. Lumber traffic, however, showed a substantial increase of 10 per cent from last year, largely due to an increase in United States housing starts. Changes occurred in the volumes carried of iron ore and concentrates and alumina/bauxite and other aluminum ores, two commodities carried almost exclusively by Class II railways, both experienced changes in volumes carried. While iron ore and concentrates traffic declined by seven per cent in 1993, the tonnage carried of alumina/bauxite and other aluminum ores increased about two-and-one-half times compared to 1992.

The majority of the domestic rail traffic, 63 per cent, derives from the transportation of ten commodities. In fact, close to one-half of the total traffic in 1993 resulted from the movement of five commodity groupings, namely, coal, iron ore and concentrates, grain, potash and lumber. The bulk of rail traffic is carried by the Class I railways.

Class I Railways

The two Class I railways, CN and CP Rail, accounted for approximately three-quarters of the total rail traffic carried in Canada. CN has traditionally carried 20 to 30 per cent more traffic than CP Rail annually. In 1993, traffic for the two railways increased by 2.1 per cent. CN's tonnage increased by less than one per cent (0.6), while CP Rail increased its volume of traffic by 3.8 per cent.

FIGURE 6.7**CN Rail Tonnage for Selected Commodities****FIGURE 6.8****CP Rail Tonnage for Selected Commodities**

Movements of bulk commodities such as coal, grain, potash, wood products, newsprint paper and sulphur accounted for approximately 54 per cent of total traffic. This represents a slight decline of two percentage points from 1992. Figures 6.7 and 6.8 depict the rail tonnage for selected commodities moved by CN and CP Rail for 1992 and 1993. The majority of this bulk traffic is destined to United States or offshore markets.

- Coal continued to generate by a large volume of traffic for CN and CP Rail, representing 14 per cent of total traffic in 1993. CN recorded close to a one per cent increase in its coal traffic in 1993, while CP Rail experienced an even greater increase of 17 per cent.
- Grain traffic for the two major railways decreased by 15 per cent in 1993, with CP Rail transporting 15.8 million tonnes and CN moving the remaining 15.1 million tonnes.
- Potash traffic for CN and CP Rail combined, decreased by four per cent in 1993, with CN experiencing a large decline of 12 per cent. CP Rail reported a traffic increase in potash of five per cent.
- Wood products traffic for Class I railways rose by 17 per cent in 1993. CN's movements of wood products increased by 20 per cent, while CP Rail showed a growth of nine per cent over last year.
- Newsprint paper traffic for the two major railways rose by six per cent from 1992. CP Rail experienced an 11 per cent growth in newsprint paper, while an increase of just under three per cent was noted for CN.
- Sulphur traffic for CN and CP Rail combined decreased by 15 per cent in 1993. Each of the two major railways reported a 15 per cent reduction in sulphur traffic.

Each of four other commodities generated between three and six million tonnes or 10 per cent of total traffic. These commodities, ranked by tonnage, were chemical products, gypsum, fertilizers excluding potash, and iron and steel.

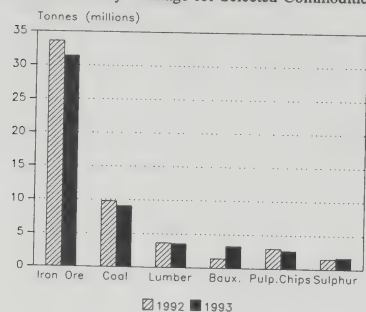
Class II Railways

In 1993, tonnage carried by Class II railways accounted for 27 per cent of the total rail traffic in Canada, but a somewhat smaller proportion of the rail industry's freight revenues due to their shorter haul operations.

Total traffic for the Class II railways in 1993 declined by 0.9 million tonnes or a 1.4 percentage decrease from 1992. Class II carriers' traffic is made up of a few high volume commodities, similar to Class I railways. In fact, iron ore and concentrates — second only to coal in terms of total rail traffic — accounted for close to 50 per cent of Class

FIGURE 6.9

Class II Railway Tonnage for Selected Commodities



II railways' traffic in 1993. Figure 6.9 shows tonnage figures for the six most important commodities moved by Class II railways in 1992 and 1993: iron ore and concentrates, coal, lumber, alumina/bauxite and other aluminum ores, pulpwood chips and sulphur. These six commodities accounted for close to 80 per cent of the 1993 Class II railways' traffic. With the exception of alumina/bauxite and other aluminum ores, and sulphur, the four other commodities showed a decrease in tonnage from 1992 levels. After reporting a sharp decline in tonnage in 1992, alumina/bauxite and other aluminum ores substantially increased again in 1993 to levels experienced in 1991. The increase in sulphur was minimal.

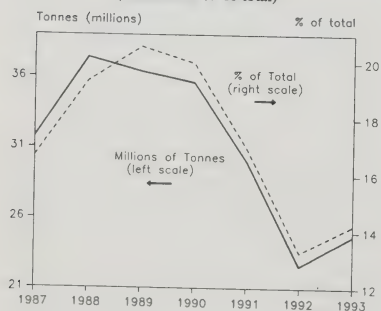
BC Rail, heavily dependent on forest products business, faced a traffic decline of approximately three per cent in 1993, due in part to work stoppages by its employees.

Bulk Commodity Profiles

This section provides an overview of some of the major commodities moved by rail and includes such factors as production, shipments, industry developments and market outlook. For each commodity examined, figures 6.10 through 6.17 show the combined total tonnage for CN and CP Rail for the period 1987 to 1993. The figures also show the importance of each commodity relative to the total shipments by both of the two major railways during the same period. In 1993, CN and CP Rail together carried between 70 and 100 per cent of the volume of these commodities carried by rail, with the exception of lumber and pulpwood chips. These two commodities are very important to BC Rail, the largest of the Class II railways.

Coal

FIGURE 6.10
CN & CP Rail Coal Traffic
(tonnes and % of total)



Coal traffic for Class I and Class II railways was up 4.6 per cent from 1992. While CN experienced a slight growth of one per cent, an increase of 17 per cent reported by CP Rail was attributable to an increase in coal production from the previous year. Class II railways' tonnage in 1993 decreased by almost seven per cent. In 1992, two large mines in southeastern British Columbia which were serviced by CP Rail were shut down; however, both mines re-opened under new ownership in 1993. Westar Mining's Greenhills operations began producing in March 1993, after being acquired by Fording Coal Ltd. Westar Mining's Balmer mine resumed production in May, 1993, as the Elkview mine after the Teck Corporation took over production. Production was down for much of last year at the Fording River operations of Fording Coal Ltd., as employees were on strike. Fording Coal recommenced mining at the end of December, 1992, after a new collective agreement was reached. Coal production returned to more normal levels in 1993, with production increasing by an estimated five per cent from 1992.

Canadian coal was exported to a total of 23 different countries in 1993, with Japan and Korea being the major importers. Figures provided by the Coal Association of Canada indicated no overall change in coal exports from 1992 to 1993. Metallurgical coal exports experienced a seven per cent increase. However, this was offset by an 18 per cent decline in thermal coal exports.

Increased demand for thermal coal is anticipated in Japan, Korea, Taiwan and Hong Kong, as coal is expected to replace crude oil as a source of energy.

Grain

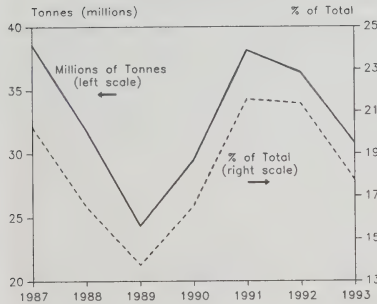
Canadian grain shipments consist primarily of wheat, barley and canola. The grain industry relies heavily on rail to move its commodities to both domestic and foreign markets. The majority of grain traffic is destined to the United States or offshore markets. Wheat accounts for approximately three-quarters of Canada's grain exports. Major competitors for wheat are the United States and EEC countries.

Grain rail traffic, including wheat, other grain and grain products for all railways was down by 15 per cent in 1993. Virtually all rail shipments were carried by CN and CP Rail. Rail shipments of wheat alone were down substantially from the previous year. Cool weather in Western Canada led to a poor crop in 1993. By December, Canada had not shipped any grain to Russia, formerly one of its largest markets, for the crop year 1993-1994. Resumption of sales to Russia depends on the Canadian government extending more credit. Sales to China have also fallen.

A shortage of rail cars was a problem for this industry in 1993. Normally, the Canadian Wheat Board's wheat and barley export program picks up in the fall, but this year traditional customers waited longer before committing to a sale. At the same time, demand from the private trade for railcars to move non-board grain and oilseeds increased, creating an extra demand on the railcar supply. Normally, Canadian railways lease railcars from the United States. However, with summer flooding in the Midwestern United States and a late harvest, grain cars in the United States were in short supply.

World prices for most classes and grades of wheat were down in 1993, as wheat trade was down and world production was up. This situation was exacerbated by increased production by traditional importing countries and by the absence of Russia as an importer. Another reason for lower prices was export subsidization. Subsidies have been lowering prices to near record lows. United States exporters discounted their grain in certain markets in 1993, making it difficult for Canada to compete with these subsidized prices.

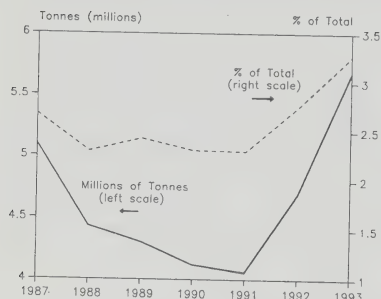
FIGURE 6.11
CN & CP Rail Grain Traffic
(tonnes and % of total)



Wood Products

For the railways, the wood products sector accounts for three sources of commodity traffic: lumber, woodpulp and pulpwood chips. This sector grew by seven per cent from 1992.

FIGURE 6.12
CN & CP Rail Lumber Traffic
(tonnes and % of total)



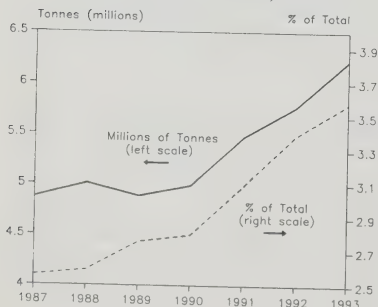
Lumber rail shipments for Class I and Class II railways were up 10 per cent in 1993, with CN's share increasing by 23 per cent. Traffic for Class II railways decreased by four per cent. The employee strike at BC Rail contributed to this decline. As a result of the strike, Canadian lumber shipments, which are usually barged south to United States rail-head, were trucked to Prince George and then loaded aboard CN North America trains.

Much of Canada's lumber is destined to the United States and shipments to this market were up from last year. This growth in traffic is attributable to several factors. The United States faced timber shortages in 1993, due to severely constrained log supplies in the forests of the Pacific Northwest. The number of United States housing starts also boomed in 1993, reflecting an improved United States economy, cheaper mortgage rates and improved consumer confidence. Another factor stimulating demand for lumber was reconstruction work in 1993 to repair damage caused by Hurricane Andrew.

The absence of Canadian lumber shipments to Europe was the result of a ban imposed this summer by the European Community on all untreated green lumber. The ban applies to lumber which has not been treated to kill possible insect infestations. The only Canadian lumber in Europe was delivered prior to the ban.

Environmental concerns, opposition to logging, and other uncertainties which prevail on the future trade potential of the Canadian lumber industry could be offset by a growing demand from Mexico. A few British Columbia companies are already shipping lumber to Mexico.

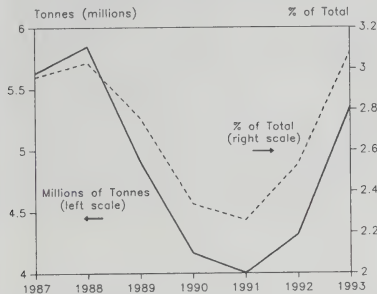
FIGURE 6.13
CN & CP Rail Woodpulp Traffic
(tonnes and % of total)



Woodpulp rail shipments for all railways in Canada were up almost two per cent in 1993. Although both CN and CP Rail registered increases of nine per cent and seven per cent respectively, overall increases were offset by a reduction in woodpulp shipments carried by BC Rail, due to the strike of its employees in 1993.

In 1993, much of Canada's woodpulp, as in previous years, was destined to the United States. According to figures provided by the Canadian Pulp and Paper Association, shipments to the United States were up approximately three per cent from last year. Woodpulp offshore exports were also up by a similar percentage. Shipments to the United Kingdom and other Western Europe countries were down from 1992 levels, but woodpulp exports to Japan and Latin America were up.

FIGURE 6.14
CN & CP Rail Pulpwood Chips Traffic
(tonnes and % of total)



Despite increased world demand for Canada's pulp and paper products in 1993, excess world capacity and competitive prices created a loss for the industry. To further aggravate the oversupply problem, mills in Chile are producing a cheaper pulp from radiata pine, which is similar to northern softwood.

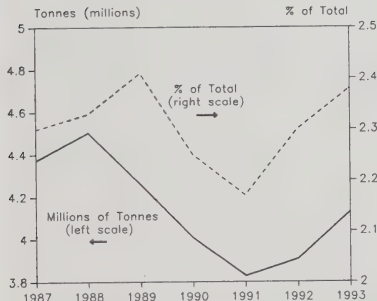
Pulpwood chips shipments for all Canadian railways increased by 10 per cent in 1993. CN was the prime beneficiary of this increase, with a 28 per cent growth. The increase was probably caused by the BC Rail strike. CP Rail's increase was more modest at four per cent. Rail traffic for pulpwood chips moved by Class II railways decreased by ten per cent in 1993. Rail movements for this commodity tend to be only for short distances.

Newsprint Paper

In 1993, rail shipments of newsprint paper for both Class I and Class II railways were up by seven per cent from the previous year. Newsprint paper traffic carried by CP Rail increased by 11 per cent, CN's traffic grew by three per cent and traffic by Class II railways grew by 15 per cent.

FIGURE 6.15

CN & CP Rail Newsprint Paper Traffic
(tonnes and % of total)



A large percentage of Canadian newsprint paper is destined to the United States. In 1993, shipments to the United States were up approximately two per cent, according to the Canadian Pulp and Paper Association. During the year, federal agencies in the United States were ordered to purchase newsprint paper containing at least 20 per cent recycled fibre, a requirement which will rise to 30 per cent in 1994. While the United States government buys only about two per cent of total United States consumption, it hopes that other sectors will follow its lead. Since Canada is already a net importer of waste paper fibre, Canadian mills will have to import even more old newspaper or increase production of recycled fibre in Canada.

Offshore shipments of newsprint paper remained virtually unchanged from last year. The decrease in exports to the United Kingdom and other Western Europe countries were offset by increased shipments to Latin America and Asia.

Sulphur

Canada is the world's largest exporter of sulphur, with the United States being its largest customer. Morocco and Brazil were Canada's largest offshore markets in 1993, however, Indonesia, South Africa and Israel were also important. Sulphur rail traffic for all railways decreased in 1993 by 10 per cent, with CN and CP Rail each reporting a 15 per cent decline in tonnage. Class II railways experienced an increase of approximately 12 per cent.

FIGURE 6.16
CN & CP Rail Sulphur Traffic
(tonnes and % of total)

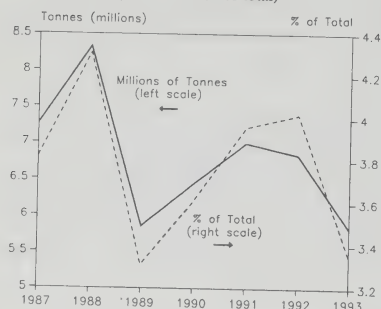
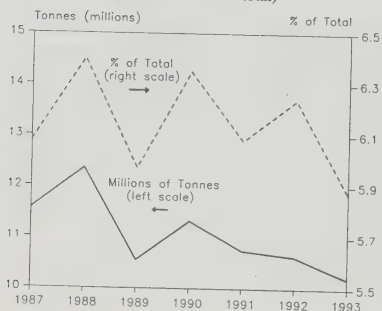


FIGURE 6.17
CN & CP Rail Potash Traffic
(tonnes and % of total)



Sulphur exports were down in 1993, while production was up, since Shell Canada's Caroline complex came on stream in March. As a result of this market situation, sulphur prices declined dramatically, making it uneconomic for certain Canadian producers to sell their sulphur. In some cases, producers were forced to stockpile. A large part of the decline in sulphur demand is attributable to the difficulties in the fertilizer industry. Approximately 55 per cent of elemental sulphur consumption is related to the production of fertilizers. Sales to the United States were down in 1993. The decline in offshore sales reflected falling sales to Morocco, Tunisia, India and the Republic of Korea; however, sales to Brazil, South Africa, Senegal, and Indonesia increased.

Potash

Canada is also the world's largest exporter of potash. Canadian potash is shipped from mines in Saskatchewan and New Brunswick. In 1993, the Potash Corporation of Saskatchewan (PCS) purchased two potash mines from Rio Algom; one near Saskatoon, Saskatchewan and the other near Sussex, New Brunswick. As a result, PCS has production facilities in both eastern and western Canada. New Brunswick potash is sold to Europe, South America and the eastern part of Canada and the United States.

Potash is one of three essential plant nutrients and is used almost exclusively for fertilizer. The United States is the world's largest importer of potash, using it to fertilize corn and soybeans farmland. In 1993, potash sales to the United States were up. For Class I and Class II railways, rail shipments of potash were down by four per cent in 1993. While CN's tonnage dropped considerably by 12 per cent, this reduction was partially offset by a five per cent increase in CP Rail's potash traffic. Potash is moved almost exclusively on the two major railways. The net decrease in traffic can be explained by the market difficulties in offshore markets. Canada's major offshore markets are China, Japan, India, Malaysia, South Korea, Taiwan and Indonesia.

The year 1993 marked the end of centralized state purchasing of potash in India. Markets have also been affected by reductions in fertilizer and agricultural subsidies in major consuming regions. The former Soviet Union continued to produce potash to optimum levels in 1993, in an attempt to gain foreign currency.

GATT

Canada's economy depends on trade, with approximately 80 per cent of Canadian exports going to the United States. Those exports are protected under the Free Trade Agreement, however, Canadian companies are always looking for markets beyond North America. On December 15, 1993 a General Agreement on Tariffs and Trade (GATT) was signed by Canada and the other participating nations. Some of the previously mentioned commodities as well as others, will be affected.

The GATT agreement will reduce tariffs on a number of key Canadian exports, such as forest products, non-ferrous minerals, fish, electronics, construction equipment and chemicals. Tariffs will also be significantly reduced on manufactured goods.

The GATT deal will affect mostly the agricultural sector. The new deal should bring under control the "European-United States agricultural subsidy war" and consequently benefit Canadian grain and oilseed producers in the future.

Demand for Freight Transport Services - Trucking

The trucking industry transported 26 million domestic shipments, a traffic volume of 126 million tonnes, for a total of 47.7 billion tonne kilometres in 1991, the last year for which complete data are available. These numbers do not include tonnage of private carriers or smaller for-hire carriers.

Domestic Traffic

The improved performance within the Canadian economy of the manufacturing and wholesale and retail trade sectors (reported in the Economy section) had a positive impact on the demand for trucking services in 1993. A significant proportion of carriers who participated in the Agency's Motor Carrier Interview Program stated that their domestic traffic volumes increased in 1993. The proportion of carriers reporting increased traffic surpassed the proportion of those who reported decreases.

TABLE 6.4
Changes in Domestic Traffic Reported in 1993
by Carriers, by Type of Trucking Services (%)

Changes in traffic reported by carriers	General Freight		Bulk		Specialty Services	
	TL	LTL	Liquid	Dry	Reefer	Other
Decrease 26% +	4	—	—	6	—	—
Decrease 5-25%	11	6	20	22	22	15
Change \pm 5%	32	40	37	22	11	54
Increase 5-25%	41	36	46	44	56	23
Increase 26% +	13	18	7	6	11	8
	100	100	100	100	100	100

Table 6.4 shows that carriers in both truckload and less-than-truckload operations reported volume increases. The percentage of carriers in each segment of the industry reported roughly the same increases. This increased traffic was identified as coming from: an increased amount of goods available for carriage, and traffic of other Canadian-based carriers for which they successfully competed. Most of the increase in traffic in the 5-25 per cent range tended to be in the lower end.

International Traffic

A significant proportion of carriers operating between Canada and the United States reported that the much improved American economy had increased the demand for their services. The proportion of carriers with international operations who reported increased traffic volumes in 1993 was far greater than the proportion of those carriers who reported decreased traffic volumes.

Carriers in both truckload and less-than-truckload operations reported volume increases (Table 6.5). Like domestic traffic, the source of this increased traffic volume was attributed to shippers producing and shipping more goods, and to the carriers themselves competing more successfully against other Canadian and American-based carriers.

TABLE 6.5

**Changes in International Traffic Reported in 1993
by Carriers, by Type of Trucking Services (%)**

Changes in traffic	General Freight		Bulk		Specialty Services	
	TL	LTL	Liquid	Dry	Reefer	Other
Decrease 26% +	—	—	—	—	—	—
Decrease 5-25%	10	7	13	17	25	11
Change \pm 5%	34	46	25	25	—	67
Increase 5-25%	36	29	50	58	75	11
Increase 25% +	20	18	12	—	—	11
	100	100	100	100	100	100

An important factor for profitability is the carrier's ability to obtain a load for the return portion (back haul) of the trip. Increasingly, more carriers stated that they would not accept a load for delivery if they were not assured a load for the return trip home. The services of freight brokers to arrange back-haul loads were used by 60 per cent of the respondents to the Motor Carrier Interview Program in 1993.

Almost all shippers participating in the Agency's 1993 Shippers Survey reported using truck services for at least some portion of their transportation needs. A larger percentage of shippers reported no change in their level of shipments in 1993 over the previous year (Table 6.6). For shippers using truckload services, 29 per cent reported an increase in their freight carried by truck. For less-than-truckload services, 24 per cent of shippers reported an increase over 1992.

TABLE 6.6
Volume of Freight Shipped by Truck - Changes Reported by Shippers

Change in Volume of Freight Moved by Truck	1988	1989	1990	1991	1992	1993	
						TL	LTL
% of responding shippers							
Increase	38	30	24	21	31	29	24
No Change	56	63	61	61	49	58	65
Decrease	6	7	15	18	20	14	11

Demand for Freight Transport Services - Marine

Total Canadian Marine Traffic

Although total tonnages have declined since 1988, the value of exports has remained stable and the value of imports has increased substantially.

Marine transport is Canada's largest international freight mover in terms of tonnage, and second largest in terms of value of trade, ranking behind trucking and just ahead of rail. In comparison with 1988, the value of marine exports in 1993 decreased by 10 per cent while imports increased by 46 per cent. In terms of tonnes, overall international marine shipments declined by more than 10 per cent between 1988 and 1992 as exports decreased by 10 per cent and imports decreased by 12 per cent. In spite of the reduced tonnages of imports, the value of imports has increased dramatically. The value of exports has remained basically stable over that period in spite of reduced volume.

Marine's main trade routes are with Asia/Oceania and Europe. In terms of value, the top five commodity groups include minerals, woodpulp, vehicles, chemicals, and base metals. Vehicle trade is a good example of a low volume/high value commodity. In value, vehicles rank in the top five commodity groups, although they represent a relatively small tonnage.

In 1992, the most recent year for which information is available, over 224 million tonnes of Canadian freight were handled in international trade, including 3.5 million tonnes of Canadian cargoes shipped through U.S. ports. Over 52 million tonnes moved in domestic trades.

Import tonnage recovered slightly in 1992 but exports and domestic traffic dropped.

Total international marine traffic for 1992 declined ten million tonnes, or 4.5 per cent, over 1991 traffic levels. Exports declined eight per cent, or 14 million tonnes, from 1991 levels, to 155 million tonnes. Imports increased by 3.2 million tonnes, almost five per cent, over 1991 levels to 70 million tonnes. According to information published by Statistics Canada for the first three quarters of 1993, the volume of international and domestic cargo handled at Canadian ports continued to fall. International shipments were down by 2.6 per cent in spite of large increases in petroleum imports and iron ore exports in the first three quarters. Domestic volumes were down by over 13 per cent, largely attributable to a decline in Great Lakes' grain and iron ore traffic but partially offset by increased west coast traffic in logs.

Figures 6.18 and 6.19 identify, for Canadian west and east coasts, major Canadian commodities traded by international trading route based on 1992 tonnage levels.

FIGURE 6.18: Major Commodity Movements - West Coast, 1992**Major Commodities Loaded at West Coast Ports by Destination (Tonnes)**

Commodity	Europe	Middle East	Other Africa	Asia/ Oceania	South America	Central America	Mexico	USA
Wheat	395,311	1,369,310	-	11,391,590	1,654,044	73,196	189,957	28,600
Barley	200,830	338,956	-	1,534,604	62,744	-	66,342	34,074
Sulphur	115,280	202,403	1,645,983	1,092,848	463,681	30,147	143,000	13,200
Coal	2,189,635	215,862	-	21,074,265	1,108,519	-	263,678	30,702
Chemicals	20	-	40,609	1,715,749	21	3,500	-	816,542
Potash	-	-	-	2,743,194	66,000	1,500	-	39,118
Lumber	987,321	88,236	13,967	3,157,338	1,162	40,885	-	579,363
Woodpulp	2,049,394	2,956	5,451	1,985,517	65,568	4,918	-	91,657

Major Commodities Unloaded at West Coast Ports by Origin (Tonnes)

Commodity	Europe	Middle East	Other Africa	Asia/ Oceania	South America	Central America	Mexico	USA
Aluminum Ores	-	-	859,153	475,415	-	30,134	-	-
Iron/Steel/Other Metals	115,143	-	-	152,462	52,269	19,167	-	17,505
Machinery/Equipment	6,090	-	-	375,881	297	-	5,129	3,421

FIGURE 6.19: Major Commodity Movements - East Coast, 1992**Major Commodities Loaded at East Coast Ports by Destination (Tonnes)**

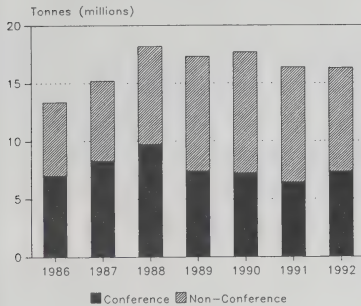
Commodity	Europe	Middle East	Other Africa	Asia/ Oceania	South America	Central America	Mexico	USA
Wheat	3,272,648	333,348	116,980	2,189,745	992,022	248,649	403,885	-
Gypsum	-	-	-	-	-	-	-	4,903,294
Iron Ores	15,258,331	-	170,720	2,679,147	141,934	151,846	-	4,988,614
Coal	1,484,150	-	-	-	224,085	24,200	231,300	46,501
Woodpulp	624,992	8,075	9,894	178,164	10,841	4,501	11,374	-
Newsprint	661,759	70,523	7,745	207,715	260,590	135,463	21,145	386,406
Potash	212,876	-	30,000	318,095	237,055	54,115	14,000	543,253
Gasoline	3,150	1,280	-	-	339,867	30,822	-	1,445,172

Major Commodities Unloaded at East Coast Ports by Origin (Tonnes)

Commodity	Europe	Middle East	Other Africa	Asia/ Oceania	South America	Central America	Mexico	USA
Sugars	42,994	-	89,073	111,402	14,015	274,318	22,180	36,402
Aluminum	18,121	-	617,401	773,642	1,647,066	975,539	-	916,591
Petroleum	9,333,822	3,295,800	2,178,141	71,865	1,105,924	135,509	70,267	261,351
Fuel Oils	995,270	742,922	131,140	109,528	102,014	329,615	-	578,740

FIGURE 6.20

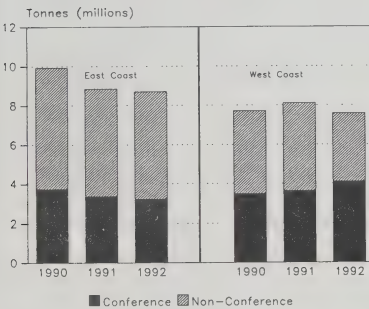
Canadian International Liner
Cargo via Canadian and U.S. Ports



Tonnes for 1989-1992 include Canadian transshipments via U.S. ports.

FIGURE 6.21

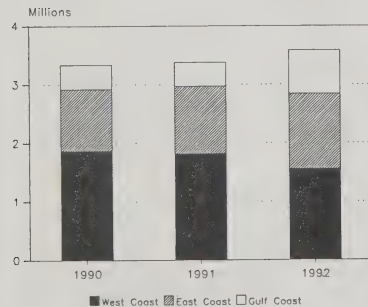
Canadian East and West coast
Liner Trade, 1990 to 1992



Tonnes include Canadian transshipments via U.S. ports.

FIGURE 6.22

Total Canadian Cargo Tonnage Diverted
Through U.S. Ports by Coastal Region



Canadian International Liner Traffic

Canadian cargo moving in liner service decreased by four per cent from 1991 to a total of 16.3 million tonnes in 1992. This follows the seven per cent decline in 1991 traffic levels reported last year. Liner traffic represented more than seven per cent of total Canadian international marine traffic in 1992, the same level as 1991.

Import liner shipments increased by 2.7 per cent to 5.8 million tonnes while exports declined by over seven per cent or 800,000 tonnes, to 10.5 million tonnes. Exports off the west coast declined by 6.6 per cent while those off the east coast dropped by eight per cent from 1991 levels. Imports declined slightly on the west coast, but increased by over five per cent on the east coast.

The volume of traffic carried by conference carriers increased from 1991 levels by 4.6 per cent to a level of 7.3 million tonnes. Traffic handled by non-conference operators in 1992 declined by 10 per cent or one million tonnes resulting primarily from reduced west coast exports. Conference volumes of west coast imports and east coast exports were similar to 1991 levels, but gains of 20 per cent in their volume of west coast exports were more than sufficient to offset a nine per cent decline in the volume of east coast conference imports. This allowed conferences to increase their share of total liner traffic by almost five per cent over 1991 levels, reaching 45 per cent in 1992. Independent lines increased their share of east coast imports as cargo handlings increased by 330,000 tonnes. The proportion of Canada's total trade carried by conference liner services was marginally higher for imports, at 48 per cent, compared to 44 per cent for exports.

Conference lines' share of liner traffic was largest for west coast imports, reaching almost 75 per cent, together with a 47 per cent share of west coast exports. On the east coast, conferences carried 40 per cent of total liner export cargo and 34 per cent of imports.

Canadian International Non-Liner Traffic

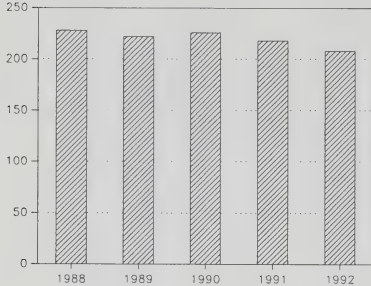
Ninety per cent of non-liner international traffic consists of dry bulk and liquid bulk shipments. Dry bulk shipments include many of Canada's natural resource products which are traded throughout the world: grain, coal, sulphur, iron ore and potash. Canadian east coast imports of petroleum products represent the vast majority of liquid bulk shipments. The remaining 10 per cent of total tonnage consists of neo-bulk cargoes and non-containerized general cargo. Major break-bulk and general cargo commodities include various forest products, metal and chemical products, machinery and equipment, including motor vehicles.

International traffic moving in non-liner service declined in 1992 by almost five per cent from 1991 levels to 208 million tonnes. This follows a decline of four per cent reported the year before. Exports

FIGURE 6.23

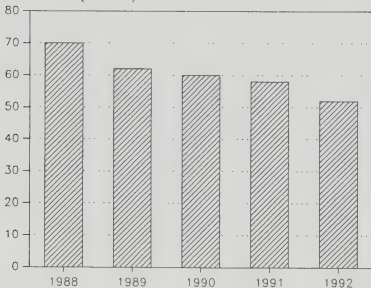
Canadian International Non-Linear Trade

Tonnes (millions)

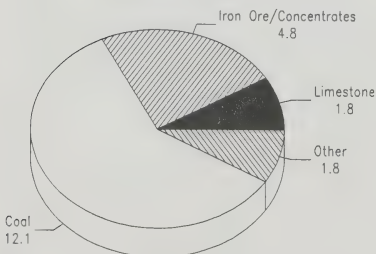
**FIGURE 6.24**

Canadian Domestic Marine Traffic

Tonnes (millions)

**FIGURE 6.25**

Canada-U.S. Cross-Lakes Traffic, 1992
 Unloadings at Canadian Great Lakes Ports
 (millions of tonnes)



declined almost eight per cent, while imports increased by almost two per cent.

Coal exports from the west coast to Japan and Korea declined significantly by 6.5 million tonnes in 1992 as rail shipments during the year fell by seven million tonnes. Coal shipments to Canada increased by 1.8 million tonnes. Deliveries of petroleum products were also reduced.

Domestic Traffic - Major Movements and Commodities

According to Statistics Canada, 52.2 million tonnes of domestic cargo were shipped by water in 1992, the latest year for which data are available. This represents a decline of almost 10 per cent from 1991 to levels not seen in the last ten years. Decreases of 38 per cent in grain shipments through the Great Lakes accounted for over 75 per cent of the decline. As reported last year, rail suffered a 30 per cent drop in eastbound grain movements, affecting marine shipments. Significant decreases in shipments of petroleum products on the east coast and forest products on the west coast account for most of the remaining differences.

Coastal shipments on the west coast accounted for 27 per cent of total domestic shipments in Canada, dominated by the movements of logs and bolts (44 per cent) and pulpwood (33 per cent). Coastal shipments on the east coast accounted for an additional 27 per cent of total domestic marine traffic. Traffic moving within the St. Lawrence and Atlantic areas consisted mainly of petroleum products, gypsum, salt, ores and minerals. The remaining 18 per cent of domestic traffic occurred within the Great Lakes region and comprised mainly limestone, coal, sand, gravel, and non-metallic minerals.

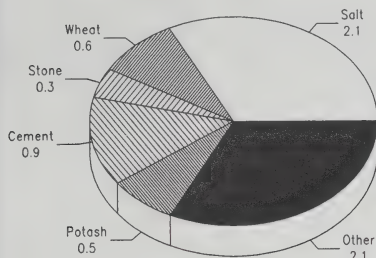
Traffic between the Great Lakes and St. Lawrence/Atlantic region, representing 28 per cent of domestic traffic, is dominated by grain and iron ore shipments.

Canadian Great Lakes Traffic

In 1992, almost 10 million tonnes of domestic traffic moved between Canadian ports on the Great Lakes. All Canadian ports on the Great Lakes are in Ontario. Another 15 million tonnes of domestic traffic moved between the Great Lakes and the Atlantic Provinces, and Quebec. Transborder trade conducted across the Great Lakes between Ontario and U.S. ports was over 26 million tonnes in 1992. Five million tonnes of international overseas cargo were handled by Canadian Great Lakes ports and an additional 16 million tonnes of cargo was traded between U.S. Great Lakes ports and Canadian points in Quebec and Atlantic Canada. These five components represent 72 million tonnes of Canadian cargo originating and terminating on the Great Lakes. (U.S. domestic trade on

FIGURE 6.26

Canada- U.S. Cross-Lakes Traffic, 1992
Loadings at Canadian Great Lakes Ports
(millions of tonnes)



the Great Lakes is approximately 100 million tonnes and direct overseas traffic is about six million tonnes per year.)

Ninety per cent of international traffic handled at Ontario ports originates or terminates at U.S. Great Lakes ports. The remainder is international overseas traffic. In 1992, three commodities dominated the inbound traffic from the United States by a large margin. Coal, iron ore and concentrates, and limestone accounted for more than 90 per cent of all inbound cargo traffic.

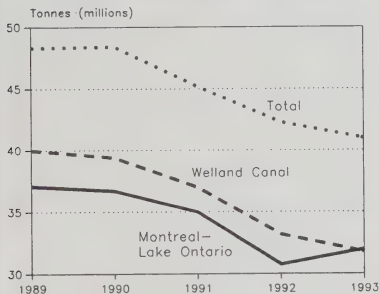
Major exports to U.S. Great Lakes ports from Ontario ports in 1992 consisted of salt, cement, petroleum-based products, wheat, potash and minerals. In total, these exports represented 55 per cent of the total traffic.

In 1992, Canadian-based shipowners handled over 68 million tonnes of domestic traffic, including some intra-Atlantic and transborder shipments.

1993 St. Lawrence Seaway Traffic

FIGURE 6.27

St. Lawrence Seaway Traffic by Section

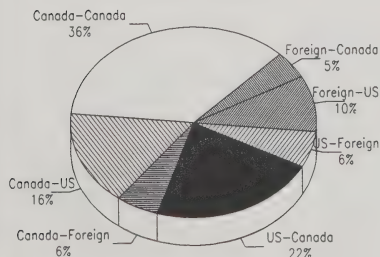


Traffic through the Seaway for the 1993 navigation season posted its first increase in five years as total Canadian and United States volumes moving through the Montreal-Lake Ontario portion were up two per cent to 31.97 million tonnes. The changes were due mainly to large enough increases in iron ore and steel shipments to offset reduced grain traffic. For the first time since the Seaway opened in 1959, the Montreal-Lake Ontario portion outstripped the volume shipped through the Welland Canal.

Traffic through the Welland Canal fell by four per cent to 31.8 million tonnes, mostly due to declines in coal shipments from Thunder Bay and U.S. ports on Lake Erie to Hamilton steel plants and Ontario Hydro generating stations.

FIGURE 6.28

Trade on the St. Lawrence Seaway
1993 Total: 41 Million Tonnes
By Origin - Destination



Canadian wheat shipments were down by over 20 per cent in 1993, but an increase of four per cent in U.S. shipments re-routed from the Mississippi helped reduce the overall losses in grain shipments to 11 per cent. The drop in Canadian grain traffic was caused largely by the Canadian government's moratorium on sales to Russia. Reductions in grain traffic have also been attributed to changing markets, shifting traffic away from Thunder Bay in favour of west coast ports, and to the rail car shortage that resulted from rail service disruptions associated with the Mississippi flood in the spring.

In spite of reduced grain shipments, iron ore shipments increased by 10 per cent. Most iron ore shipments originated at Sept-Îles and were destined for steel mills on Lakes Erie, Ontario and Michigan.

Iron and steel shipments from Europe (mainly France, Italy, Belgium and Holland) destined to Canadian and U.S. Great Lakes customers posted

FIGURE 6.29
Domestic and Transborder Trade
on the St. Lawrence Seaway

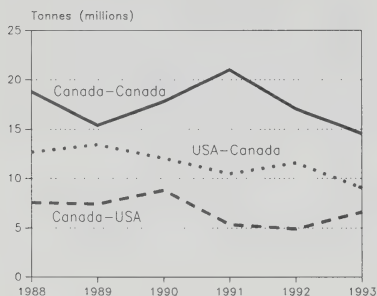


FIGURE 6.30
Western Arctic Traffic
1988 to 1992

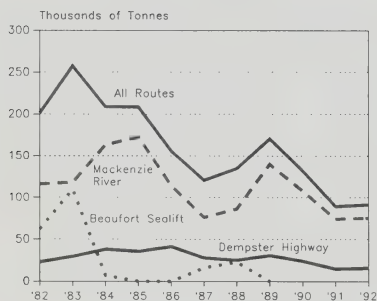
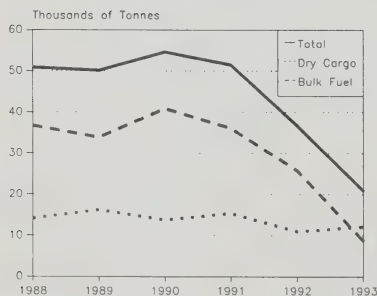


FIGURE 6.31
Eastern Arctic Traffic
1988 to 1992



the largest increases to over three million tonnes, a 35 per cent increase over 1992.

Significant increases in U.S. trade via the Seaway were a key factor in the overall tonnage increase registered on the Montreal-Lake Ontario section. U.S. wheat shipments routed through the Seaway and eastern Canada for transshipment to overseas markets, were equal to 1992 levels at about one million tonnes, but U.S. overseas wheat exports almost doubled from their 1992 level of 500,000 tonnes. Other increases in shipments of a variety of commodities have been attributed to improvements in the United States economy, more specifically in the Great Lakes region.

Northern Marine Traffic

The postponement of resource development projects has resulted in a long-term decline in traffic moving to points in the western Arctic north of the Arctic Circle. From a peak of almost 260,000 tonnes during the busy oilfield exploration period in 1983, northbound traffic dropped to about 120,000 tonnes in 1987. This trend was interrupted only briefly by a two-year resurgence of project logistics support for the North Warning System and for new military air facilities during 1988-89. In 1990, however, transportation to the western Arctic resumed its long-term decline, levelling off in 1991-92 below 100,000 tonnes per year. Early reports indicate a moderate increase in traffic volume for 1993.

During the early 1980s, both the Dempster Highway and Beaufort Sealift became strong competitors with the Mackenzie River system as transportation corridors to the western Arctic. Operations on each of these corridors diverted different traffic segments which, prior to 1980, had been relatively captive to the Mackenzie River. Deep draft vessels employed in the Beaufort Sealift diverted large volumes of bulk fuel and resource development support cargo while Dempster Highway trucking operations captured an increasing share of Mackenzie River deck cargo. Bulk fuel remains the major component of northbound traffic and is better suited to barge transport than long-haul trucking, but since 1986, more than half of all other community resupply traffic to the western Arctic has moved over the Dempster.

The unusual geographical circumstances which find Canada separating Alaska from the lower 48 U.S. states and, in turn, find Alaska separating northwest Canada by a few miles from tidewater, generate significant transborder movements to accommodate northbound traffic demands of both countries. Mackenzie system service to the Alaskan Arctic is no longer limited to sporadic Prudhoe Bay project cargoes. Increasingly it includes barge deliveries to Alaskan coastal communities as far west as Point Hope.

Traffic in the eastern Arctic has also declined substantially since 1988, especially shipments of petroleum, oils and lubricants. This is partly due to the final closure of a number of DEW line sites, but more a result of the Government of the Northwest Territories' decision to put northern bulk fuel supply contracts out to tender. Shipments of dry cargo have remained relatively stable over the period.

Ports Traffic

Ports represent a significant component of the nation's multi-modal and intermodal transportation network, linking inland surface transportation services (including truck, rail and marine) and international marine services. As such, ports connect various transportation services into transportation systems, offering choices to international as well as domestic shippers for entire or partial routes for moving their cargo.

Canada Ports Corporation

Ports Canada has reported that traffic volumes through its ports reached 166.2 million tonnes in 1993, a mere 0.4 per cent less than the 1992 result of 166.9 million tonnes. This follows an 8.3 per cent decline in 1992.

Local Port Corporations

The seven local port corporations of Vancouver, Saint John, Montreal, Halifax, Quebec, Prince Rupert, and St. John's, representing Canada's leading multi-purpose international ports. Together these ports handled 137.3 million tonnes of traffic in 1993, down by 2.5 per cent from 1992 volumes.

Gains in coal shipments, liquid bulk, and containerized cargoes were offset by reductions in grain shipments by almost five million tonnes, and reductions in dry bulk cargoes by 4.6 million tonnes from 1992 results.

Saint John, New Brunswick, and Halifax increased their handlings over 1992 levels, by 23 per cent and one per cent respectively. Halifax's marginal increases in grain, dry and liquid bulk and container tonnages resulted in total handlings of 14.1 million tonnes, an improvement of 200,000 tonnes over 1992. Saint John's 1993 handlings of 19.6 million tonnes, represent an increase of 3.6 millions tonnes over 1992, attributable mainly to petroleum imports.

Vancouver's handlings reached 60.8 million tonnes, down four per cent from 1992. Coal shipments improved by 11.6 per cent over 1992 levels. Shipments of non-containerized general and break-bulk cargo also increased. Grain shipments fell short of 1992 levels by two million

FIGURE 6.32

Shares of Tonnage with the Port System

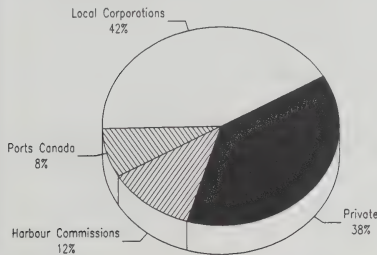
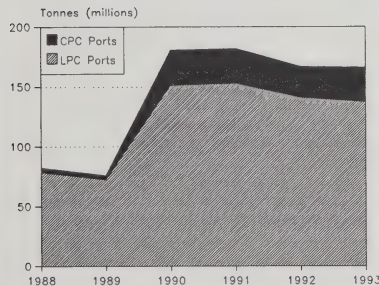


FIGURE 6.33

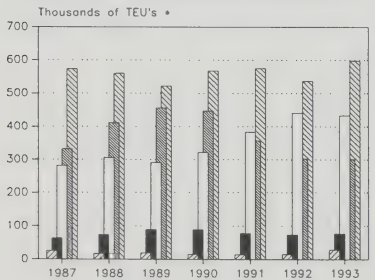
Ports Canada System Handlings



Decreased shipments of grain and other dry bulk cargoes produced a 2.5 per cent drop in tonnage at Canada's leading multi-purpose ports.

Containerized traffic increased in 1993.

FIGURE 6.34
Container Throughput at
Major Canadian International Container Ports



■ Saint John ■ St. John's □ Vancouver ■ Halifax ■ Montréal

*Includes: Loaded, Empty, Inbound, Outbound, Foreign and Domestic

tonnes. Dry bulk and petroleum shipments combined were down by another one million tonnes.

Montreal increased handlings of dry bulk, grain and coal by over 425,000 tonnes from 1992, but these accomplishments were offset by a reduction of petroleum shipments by 1.1 million tonnes due to higher than normal inventories on hand. Montreal handled a total 16.5 million tonnes in 1993, a drop of almost one million tonnes, or 5.5 per cent.

The port of Quebec City lost ground by 16 per cent overall with losses of over two million tonnes of grain, as well as reductions in dry bulk, general and break-bulk traffic. Modest increases in petroleum shipments occurred over 1992 levels.

These local port corporations are, as a group, highly oriented towards international traffic. About 85 per cent of handlings are either import or export shipments. The port corporations handle over 50 per cent of Canada's international trade and about 20 per cent of total domestic marine shipments. Overall, about 40 per cent of all marine shipments in Canada are handled by local port corporations.

Containerized Traffic

Containerized traffic at Canada's five major container ports — Montreal, Vancouver, Halifax, St. John's and Saint John — increased by 1.5 per cent over 1992 levels to a total of 12.5 million tonnes, a five per cent increase in TEUs handled. This follows a decline that occurred in 1992, bringing 1993 levels of TEUs handled back to near 1991 levels.

Montreal improved its position as Canada's leading container port, handling 596,120 TEUs in 1993, an increase of over 11 per cent from 1992. This represents an increase of almost three per cent over 1992 in volumes of containerized traffic handled.

After achieving steady growth since 1987 and reaching a record 441,100 TEUs handled in 1992, Vancouver reported a decrease of 1.5 per cent in the number of TEUs handled in 1993. This represents a five per cent reduction in tonnage over 1992 levels. In spite of this drop, Vancouver maintained its position, held since 1991, as Canada's second busiest container port.

Halifax increased its tonnage of containerized freight handled by 2.3 per cent. Halifax has benefitted from the return of ACL service and use of A.P. Moller Maersk's deepsea draft for lightening-off before proceeding to New York where draft is limited to 38 feet.

St. John's, Newfoundland, has reported increases in TEUs handled of almost five per cent although tonnages have declined marginally.

Although the smallest of the container ports, Saint John reported an 80 per cent increase to 28,366 TEUs handled in 1993 as a result of winter navigational hazards on the St. Lawrence River. The additional TEUs handled represent about 100,000 tonnes of container traffic which was re-routed through Saint John.

Canada Ports Corporation - Divisional Ports

C.P.C. divisional ports reported a 10 per cent increase in overall tonnage.

The eight divisional ports of the Canada Ports Corporation also handle a high proportion of international traffic. Eighty per cent of their port handlings is international traffic while the balance represents domestic shipments. As a group, these ports handle about 10 per cent of Canadian international shipments and five per cent of domestic shipments.

In 1993, tonnages handled by these eight centrally administered ports increased by 10 per cent over 1992 levels, to 28.9 million tonnes. Increases over 1992 levels have occurred mainly at Sept-Îles as iron ore shipments increased by two million tonnes to 20.7 million tonnes. Belledune has increased its dry bulk and coal shipments by 0.5 million tonnes each.

Harbour Commission Ports

Harbour Commission ports handle over 10 per cent of total marine shipments in Canada. About six per cent of Canada's international traffic and about 23 per cent of domestic shipments are handled by Harbour Commission ports. About 70 per cent of traffic handled by Harbour Commission ports is domestic traffic, with international traffic representing the remaining 30 per cent of total tonnages handled.

Other Ports

Private industrial facilities handle about one-third of Canada's total international marine traffic and over 50 per cent of total domestic traffic. As a group, industrial facilities split their traffic almost equally between domestic and international traffic.

Private industrial facilities handle almost as much total tonnage as the seven local Ports Canada corporations, and about 40 per cent of total marine shipments in Canada. Port Cartier is by far the most significant.

Port Cartier maintained its ranking as Canada's second largest port in 1993, by handling over 21 million tonnes of cargo. Exports of iron ore and grain comprise 75 per cent of its handlings. The balance consisted of inbound domestic grain and outbound iron ore shipments destined to Canadian steel plants in Ontario and Quebec.

Railway Intermodal

FIGURE 6.35
CN and CP Rail Intermodal Traffic

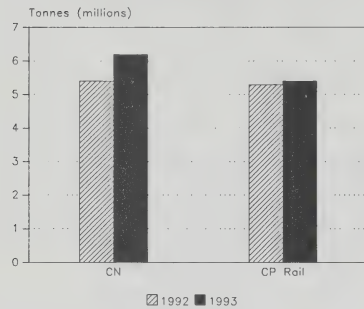


FIGURE 6.36
Percentage of Surveyed Shippers using
Intermodal Transport Services
1988-1993

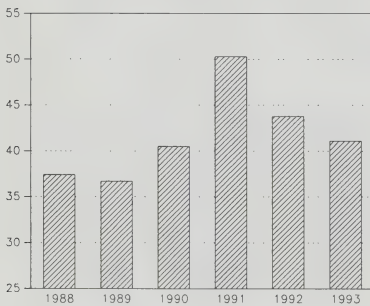
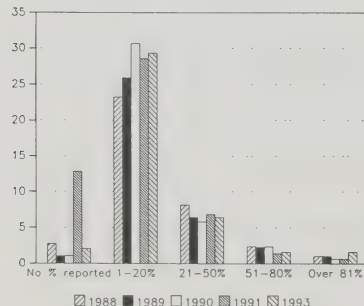


FIGURE 6.37
Relative Importance of Intermodal Services
in Shippers' Total Transportation



The two Class I railways have taken substantial initiatives and made major investments in intermodal services in the last few years. Intermodal movements represented a substantial and increasing portion of both CN and CP Rail's traffic.

Intermodal traffic consists of containers-on-flat-cars (COFC) and trailers-on-flat cars (TOFC). In 1993, intermodal rail traffic for the two major railways increased by eight per cent or 0.9 million tonnes over the previous year. CN's intermodal traffic for 1993 amounted to 6.2 million tonnes, an increase of 14 per cent. CP Rail reported a three per cent rise, increasing to 5.4 million tonnes in 1993 (Figure 6.35). The substantial rise in CN's intermodal traffic is due in part to new intermodal initiatives undertaken by CN during 1993, as previously mentioned in the "Service" section.

In 1993, intermodal shipments accounted for the third largest volume of traffic moved by the two major railways, exceeded in tonnage only by coal and wheat shipments.

CN's COFC traffic increased to 4.2 million tonnes in 1993, from 3.5 million tonnes reported last year. CP Rail experienced a slight increase in COFC traffic, reaching the same level in 1993 as that reported by CN. Each of CN and CP Rail's TOFC traffic remained constant from 1992. In both years, CN reported more TOFC traffic than CP Rail.

Traditionally, domestic intermodal shipments were carried on trailers-on-flat-cars. However, containers are being used more and more for intermodal movements of goods. Approximately 73 per cent of traffic carried intermodally by the two major railways was moved in containers. Rail intermodal traffic in international markets is also moved predominantly in containers.

Shippers and Intermodal Services

According to the Agency's Shippers Survey results, forty-one per cent of shippers in 1993 indicated that they used intermodal services to transport their products (Figure 6.36). Over 70 per cent of these intermodal users indicated that they used such services to move up to 20 per cent of their traffic. The relative importance of intermodal services in shippers' total transportation for the years 1988 to 1993 is depicted in Figure 6.37.

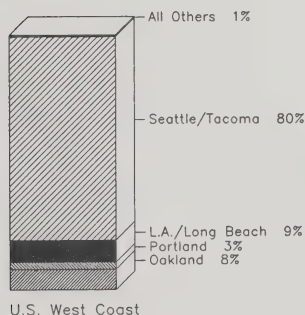
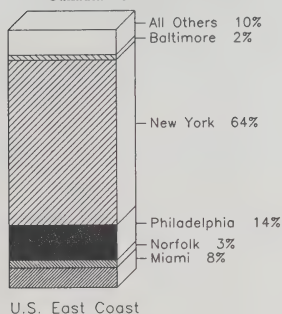
Shippers' survey results indicated that the most frequently used modal combination was rail-truck in both the domestic and transborder markets, including service between Canada-Mexico. Respondents to offshore intermodal services reported that they used truck-marine and truck-rail-marine modal combinations to ship their products overseas.

Canadian Cargo Routed Through U.S. Ports

One out of every six Canadian containers was routed through a U.S. port in 1993.

According to data extracted from the Journal of Commerce's PIERS database, Canadian importers and exporters continued in 1993 to ship cargo through U.S. ports. Compared to 1991 and 1992, an increasingly larger number of TEUs were routed through U.S. ports in 1993, for a total of just over 278,000 handled by American ports on the east, Gulf and west coast ports, and other ports. This represents an estimated 19 per cent of total Canadian TEUs handled at leading Canadian container ports in 1993 and an increase of approximately 20 per cent of diverted Canadian TEUs over the two previous years.

FIGURE 6.38
Major U.S. Ports Handling Canadian Container Traffic



Diversion of Canadian cargo through U.S. ports is much greater on the west coast.

TABLE 6.7
Canadian Cargo Routed Through U.S. Ports in 1993

	EXPORTS		IMPORTS	
	TEUs	Tonnes	TEUs	Tonnes
U.S. East Coast Ports	51,476	600,694	49,002	651,142
U.S. West Coast Ports	69,438	818,712	103,828	749,802
U.S. Gulf Coast Ports	2,443	361,952	1,775	174,382
Other U.S. Ports*	6	442	52	35,981
TOTAL	123,363	1,781,800	154,657	1,611,307

* Includes Honolulu, Detroit, Milwaukee, Cleveland and Chicago

As seen in Table 6.7, U.S. west coast ports handled the lion's share of Canadian cargo, with 173,266 TEUs or 62 per cent, followed by east coast ports with 100,278 TEUs or 36 per cent. Ports on the U.S. Gulf put through only a little over 4,000 TEUs or two per cent of Canadian cargo in 1993.

As in past years, the ports of New York and Seattle/Tacoma — two major U.S. ports — have managed to handle the majority of Canadian cargo transshipments. On the east coast, the port of New York dominated other east coast ports by a large margin, handling 72 per cent of import and 53 per cent of exports of Canadian container traffic transshipped through U.S. east coast ports. The only other ports to compete with New York were Miami with 14 per cent of Canadian export TEUs and Philadelphia which handled 17 per cent of Canadian imports and 10 per cent of exports. On the west coast, the sister ports of Seattle and Tacoma again handled by far the largest number of Canadian TEUs of any U.S. west coast port, constituting 74 per cent of Canadian originating cargo and 83 per cent of Canadian destined cargo transshipped through U.S. west coast ports. Other west coast ports

included Los Angeles/Long Beach, Oakland and Portland (Oregon). Together these ports handled between five and ten per cent of total west coast transshipments.

Container traffic through Gulf ports and other ports made up a very small proportion of total Canadian TEUs transshipped through U.S. ports, amounting to a little over 1.5 per cent and consisting mostly of Canadian import cargo.

Canada's Trade and Transportation Services

Canada is very dependent on trade. In 1993, exports totalled \$186.7 billion, more than 25 per cent of all Canadian economic activities. As a trading nation, Canada's prosperity depends on its competitiveness. Canada's ability to compete successfully in foreign markets depends on the efficiency of the country's transportation system.

TABLE 6.8
Sources of Canada's Trade, 1988 and 1993

	1988		1993	
	Exports	Imports	Exports	Imports
	<i>\$ Billions</i>			
U.S.	100.9	86.0	150.6	113.6
Mexico	0.5	1.3	0.8	3.6
Rest of the world	37.1	43.9	35.3	52.3
Total	138.5	131.2	186.7	169.5

Canada's main trading partner is the United States, with an 80 per cent share of Canada's 1993 exports and a 63.5 per cent share of imports.

Canada's trade with the United States uses all the modes of transportation. The Canada-U.S. trade for all modes 1988 and 1993 is shown in Table 6.9.

For Canada's non-U.S. trade, the share of each mode is somewhat different and surface transportation accounts for a smaller share of the trade value than in the Canada-U.S. trade (Table 6.10).

TABLE 6.9
Canada's Trade with the U.S. Broken Down by Mode,
1988 and 1993

	1988		1993	
	Exports	Imports	Exports	Imports
	<i>\$ Billions</i>			
Truck	58.8	63.4	86.8	93.1
Rail	25.9	11.3	36.7	9.7
Marine	4.4	1.7	4.4	1.9
Air	3.4	5.1	6.8	8.6
Other	8.4	4.5	15.9	0.3
Total	100.9	86.0	150.6	113.6

TABLE 6.10
Canada's Non-U.S. Trade Broken Down by Mode,
1988 and 1993

	1988		1993	
	Exports	Imports	Exports	Imports
	<i>\$ Billions</i>			
Truck	2.7	10.2	3.4	14.6
Rail	0.3	2.1	0.4	2.1
Marine	29.3	19.0	26.1	28.5
Air	5.3	4.5	6.2	9.3
Other	0	9.4	0	1.4
Total	37.6	45.2	36.1	55.9

Rail and Canada's Trade

Exports moved by rail amounted to \$37.1 billion in 1993. Of that amount, \$36.7 billion or 98.9 per cent was exported to the United States. Five commodities (vehicles, woodpulp, wood, base metals and chemicals) generated \$32.3 billion or 88 per cent of that trade traffic.

The U.S. imports by rail amounted to \$9.7 billion or 82 per cent of the total rail imports of \$11.8 billion. Vehicles, chemicals, machinery, plastics and minerals were the top five commodities imported from the United States by rail in value terms. They represented some \$8.1 billion or 84 per cent of total trade traffic moved from the United States by rail into Canada.

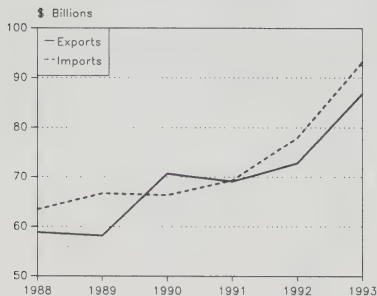
Canada-U.S. Commodity Flows and Rail Gateways

CN and CP Rail traffic destined to the United States passes through specific gateways. Close to 70 per cent of CP Rail's U.S.-bound traffic goes through three gateways: Emerson, Manitoba; North Portal, Saskatchewan; and Detroit, Michigan. Between 1988 and 1993, the percentage of traffic going through Emerson decreased. However, over the same time period, traffic crossing the border at North Portal increased, peaking in 1992. At Detroit, traffic decreased marginally over these years. Potash traffic destined for the United States passes through the Emerson and North Portal gateways. Lumber, sulphur, and bituminous coal traffic pass through North Portal. Newsprint paper traffic enters the United States via the Detroit gateway.

Between 1988 and 1993, approximately 60 per cent of CN's traffic passed over the United States border through two Ontario gateways, one at Fort Frances and the other at Port Huron. Lumber, potash, sulphur and woodpulp traffic crosses at Fort Frances. Newsprint paper bound for the United States passed through the gateway at Port Huron.

Trucking and Canada's Trade

FIGURE 6.39
Canada's Trade with the U.S. Carried by Trucks
over the Period 1988-93



As shown in Tables 6.9 and 6.10, the trucking industry carried the largest share of the total value of the trade between Canada and the U.S. In 1993, 56.1 per cent of exports and 63.5 per cent of imports to the United States were carried over the border by trucks (Figure 6.39).

Approximately 80 to 85 per cent of the Canada-U.S. trade moved by trucks takes place through eastern crossing points. These crossings are found along the border which extends from New Brunswick to western Ontario on the Canadian side and from the State of Maine to Minnesota on the United States side. Three Canadian provinces — Ontario, Quebec, and New Brunswick — are situated along this important segment of the Canada-U.S. border. Together they represent two-thirds of Canada's population and three-fourths of its manufacturing employment. On the United States side, six of the eight states along the eastern border have crossings to Canada. They are Maine, Michigan, Minnesota, New Hampshire, New York, and Vermont.

Two-thirds of that border is delimited by waterways including the St. Lawrence Seaway and four of the five Great Lakes. This concentrates rail and highway border crossings at bridges and tunnels such as:

- several bridges across the Niagara River;
- a number of bridges across the St. Lawrence River;
- the Ambassador Bridge, Detroit-Windsor Tunnel and rail tunnel across the Detroit River;
- the Blue Water Bridge and CN North America Tunnel across the St. Clair River;
- the International Bridge and the Wisconsin Central railway bridge across the St. Marys River.

FIGURE 6.40
Provinces/States Members of the Eastern Border Transportation Coalition to
Improve Border Crossing Facilities and Processes



A total of 88 border crossings are located in this region, including 62 highway crossings, 20 railway crossings used by nine railway lines, and six ferry crossings (three vehicular and three railway).

The vast majority of international freight traffic tends to cross the Canada-U.S. border in large volumes along a few major corridors. While there are several major highway corridors serving this international traffic, three are clearly the most significant.

The first major corridor crosses the Niagara Frontier and includes Ontario highways 403, 405, and the Queen Elizabeth Way, and Interstate highways 90 and 190, in the United States. These highways provide access to the border at Buffalo, Ft. Erie and Niagara Falls.

The second corridor connects southwestern Ontario with southeastern Michigan and includes highways 401 and 402 in Canada, and Interstate highways 69, 75, and 94 in the United States.

A third corridor connects the province of Quebec through highway 15, south of Montreal, to New York Interstate 87.

TABLE 6.11
Eastern Border Crossing Points

Province-State	Road	Rail	Ferry	Total
New Brunswick-Maine	16	3	0	19
Quebec-Maine	5	1	0	6
Quebec-New Hampshire	1	1	0	2
Quebec-New York	8	1	0	9
Quebec-Vermont	13	4	0	17
Ontario-New York	7	3	0	10
Ontario-Michigan	4	3	6	13
Ontario-Minnesota	8	4	0	12
Total	62	20	6	88

The Western provinces have a considerable number of ports of entry/exit to the United States due to the long contiguous distance involved. The ports of entry/exit are located along major highways: Manitoba-17; Saskatchewan-12; Alberta-6; British Columbia-12.

TABLE 6.12
Canada's Exports by Truck to the U.S., by year, by Canadian Region of Origin (\$ Million)

Region of Origin	1988	1989	1990	1991	1992	1993
Atlantic	1,816.8	1,937.0	1,948.6	2,127.4	2,183.5	2,281.2
Quebec	7,736.7	7,761.2	10,778.0	13,022.9	11,625.6	11,974.
Ontario	43,315.2	42,038.4	49,923.5	46,598.1	50,406.0	62,455.
Prairies	2,754.3	3,131.5	4,159.5	3,590.5	4,006.7	4,865.5
B.C.	3,185.2	3,284.2	3,881.8	3,740.4	4,495.6	5,236.5

Tables 6.12 and 6.13 show the dollar value of exports and imports by region/province for the period 1988-93. Ontario has the largest share of exports and imports to/from the United States.

TABLE 6.13
Canada's Imports by Truck from the U.S. by year,
by Canadian Region of Entry (\$ Millions)

Region of Entry	1988	1989	1990	1991	1992	1993
Atlantic	1,050.0	1,131.5	1,207.6	1,215.0	1,380.1	1,420.3
Quebec	6,533.5	7,192.7	8,120.5	7,610.7	8,032.5	8,162.4
Ontario	47,806.5	49,491.9	47,683.2	4,9640	56,489.6	68,758.2
Prairies	4,559.5	4,814.2	5,090.7	5,893.3	6,294.5	8,160.6
B.C.	3,489.2	4,059.7	4,270.6	4,961.5	5,759.7	6,640.3

FIGURE 6.41
Major Eastern Canada/United States Highways

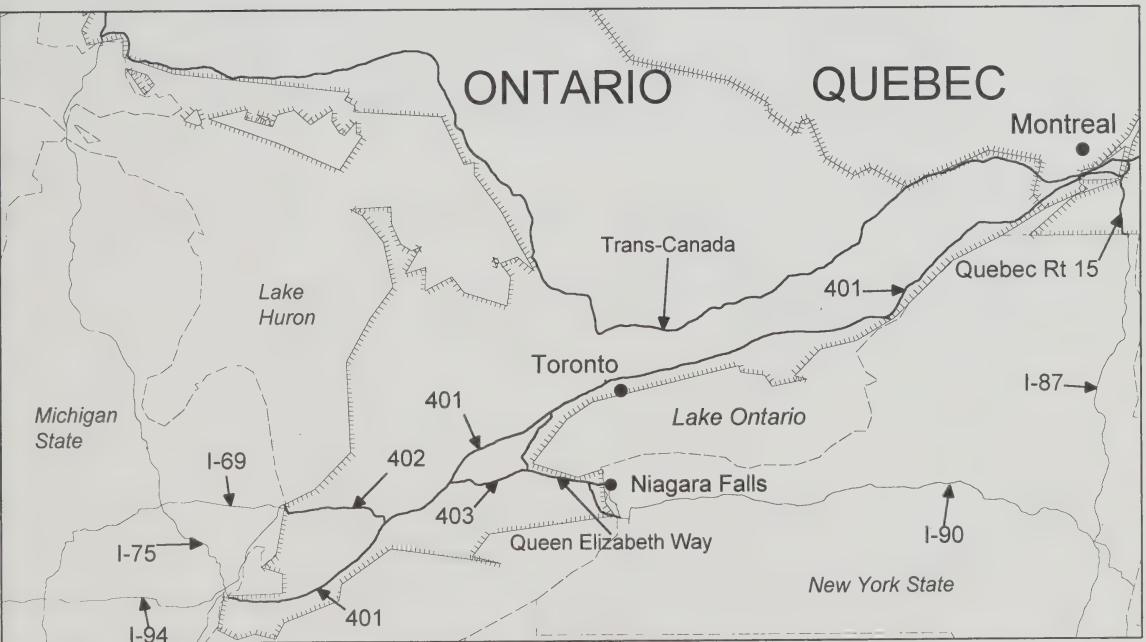


FIGURE 6.42
Canada/United States Border Crossings in the West



TRANSPORT PRICES

Highlights of 1993

Air Services

Carriers concentrated on cost-cutting measures to improve revenues and restore profitability instead of price-cutting measures to stimulate demand.

Rail Services

Rates in rail services remained virtually unchanged. Increases averaged less than one per cent.

Trucking Services

Shippers and carriers reported only small rate increases for the trucking industry. The average increase was less than the rate of inflation.

Marine Services

Overcapacity had a major impact on rates for transatlantic services, especially westbound. Growing transpacific traffic helped support steady rate increases. Freight rates remained stagnant on the Great Lakes/St. Lawrence System.

Introduction

Many factors determine transportation prices and rates such as:

- . the overall economic environment;
- . the regulatory and institutional environment;
- . the level of capacity available within the industry;
- . the availability of equipment;
- . the level of demand;
- . inter- and intra-modal competition;
- . special service considerations;
- . the timeframe under which the service is to be performed; etc.

This section addresses prices and rates for the four modes of transportation covered by this review.

Air Services

Passenger Rates

In 1993, carriers concentrated on cost-cutting measures to improve revenues and restore profitability rather than price-cutting measures to stimulate demand.

The airline industry attempted a more rational approach to fares in 1993. Carriers, although reluctant to introduce fare increases, were also hesitant to repeat the fare wars of the previous year. Small skirmishes, however, did occur in certain markets. For example, prior to its demise in March, Nationair continued to challenge the major carriers. In January, Nationair introduced more low-fare scheduled flights on the Toronto-Ottawa route as well as additional price cuts on travel between Montreal-Toronto. Air Canada and Canadi*n quickly responded by lowering their fares. With the departure of Nationair from the Montreal-Toronto market, new fare schedules were introduced by Air Canada and Air Ontario and the low fares that had been initiated to remove any fare advantage were dropped.

Nationair's exit from the charter market also affected charter fares. Air Transat, which emerged as Canada's largest charter carrier following Nationair's exit, announced early in April that it would be raising its fares by at least five per cent.

In 1993, airlines cut the number of discount fares available to the travelling public on most domestic routes. Still, the Canadian traveller had access to a wide range of fares. Discounts as deep as 72 to 79 per cent of economy fares were offered on particular routes. The level of discounting, for example, was higher on long-haul domestic routes served by charter as well as scheduled operators. A third quarter

Air Fares

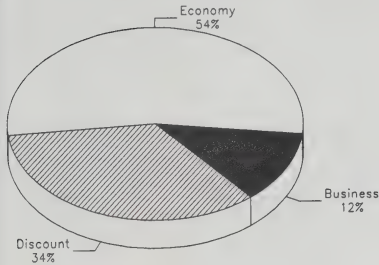
Business fares have largely replaced the first-class fare in domestic markets, offering passengers additional convenience and on-board amenities. Business fares are usually available on inter-city and commuter routes and are priced about 12 to 15 per cent above the regular economy fare.

Economy or basic fares are the standard unrestricted fares offered on each route. These fares are commonly used by the "must-go" traveller who is unable or unwilling to meet the requirements attached to various discount fares.

Discount fares are priced below the economy fare (reductions range up to 80 per cent) and are available on almost all routes; however, these fares are restricted both in number and by other "fences" such as requirements for advance purchase, minimum or maximum stay, non-refundability, or off-peak travel. The size of the discount generally varies directly with the extent of restriction. Some discount fares are available throughout the year, while others are offered through seasonal "seat sales".

comparison of the average domestic economy fares on the 124 sample routes showed a four per cent increase. This was, however, a result of the five per cent increase introduced on a number of routes in December, 1992.

FIGURE 7.1
Commercial Travellers
Air Fare Usage 1993



Canadian Professional Sales Association Survey

The Agency continued its annual survey program in cooperation with the Canadian Professional Sales Association and the North West Commercial Travellers' Association. Over 4,700 surveys were sent to members of these associations, representing a cross section of regular air transportation users.

The average number of trips by respondents for business purposes over the preceding 12-month period was nearly 11 for business purposes and over two for leisure. These results are similar to 1992 levels of just over 10 and just under two, respectively. The proportion of business trips outside of Canada has grown from negligible levels five years ago to approximately 25 per cent of the total in 1993, five per cent higher than 1992.

When travelling by air, respondents reported that their use of the various fares available did not change in 1993 compared to the 1992 survey results. However the 1993 results still confirm the trend of the last several years away from travelling on business or full economy class fares, shifting toward discounted fares for not only leisure travel but also for business travel.

Fare Class	Shares (%)		
	1991	1992	1993
Business	16	13	12
Economy	54	51	54
Discount	30	36	34

Restrictions are placed on discount fares by the airlines in order to encourage the business traveller to purchase more expensive but more flexible tickets. Of the fences in place, the requirement for a Saturday night stay is the most effective barrier to cheaper tickets; others include the requirement to book in advance and minimum stay requirements.

Faced with a climate of cost reduction, one-half of respondents reported that their travel budgets had been reduced over the preceding 12 months. Of this group, one-half reduced the number of trips they made and one-third purchased cheaper tickets. On average, business travel was split almost evenly by plane and by car. Over two-thirds of personal trips were by car.

Eighty-three per cent of respondents participated in at least one frequent flyer program (FFP) in 1993, and on average are enrolled in two plans. Forty-six per cent of respondents have redeemed frequent flyer points in the last year, 79 per cent of these for free travel. When asked whether they would trade the perks and benefits of their FFP for cheaper air tickets, 54 per cent said they would while 46 per cent answered no.

Nearly half of respondents also participated in consumer loyalty programs where points can be earned toward free air travel and other items through purchases of other sponsor's products (normally consumer goods). Eighteen per cent of those participating had redeemed points in the past 12 months.

Only four per cent of respondents indicated that they had taken advantage of confidential contracts to reduce their travel expenditure (negotiated mostly through their company); this is a large drop from 1992, when 10 per cent of respondents had used this method.

The majority of respondents felt that domestic air fares had risen, but that fares on transborder and other international routes had remained stable since last year.

Discount Fares¹

The supply of discount fares is largely controlled by the airlines' yield management systems, a concept developed in the 1970's. These systems, used by all major airlines, are linked to computer reservation systems and are designed to improve airline revenues. Market conditions and ticket sales are continuously monitored and adjustments are made to the availability of various discounts in order to increase passenger loads. Yield management systems are used to optimize the mix of seats at various fares on any given flight.

During the third quarter of 1993, between 84 and 96 per cent of all generally available discount fares offered by Air Canada and Canadi*n were discounted by at least 45 per cent. Routes with discounts exceeding 60 per cent were top 25 or affiliate routes. The average number of discounts available decreased slightly from seven in 1992 to five.

Second quarter data indicate that 63 per cent of passengers travelling in southern Canada travelled on discount fares, down slightly from the 65 per cent of 1992. The percentage of passengers who travelled on deep discount fares, i.e. fares discounted by 30 per cent or more off the full economy fare, was 46 per cent.

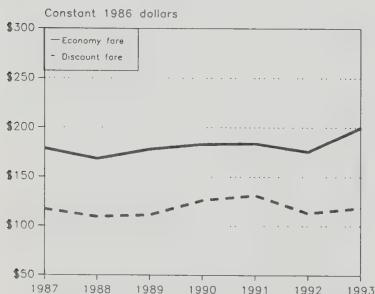
Top Twenty-five Routes

On the twenty-five most heavily travelled domestic routes¹, thirty-two per cent of the lowest fares were discounted by 60 to 65 per cent off the regular economy fare. Economy fares on the St. John's-Toronto route were discounted at an even higher rate of 72 per cent.

Since 1991 there has been a decrease in the average number of discount fares offered. With the departure of carriers such as Intair, City Express and Nationair, routes such as Toronto-Montreal and Toronto-Ottawa saw significant reductions in the number of discount fares available. In 1991, the average number of discount fares rose to 14. The number of discounts per route has since declined from nine in 1992 to six in 1993.

The average economy fare has increased 41 per cent since 1987 while the average discount fare paid by travellers on these routes increased by 28 per cent. When expressed in constant dollars, the average economy fare increased by 13 per cent while there was a minimal increase of two per cent in discount fares. Sixty-four per cent of all passengers travelled on discount fares in 1993 compared with 71 per cent in 1992. The proportion of travellers travelling on discount fares on the popular long-haul routes where domestic charter programs were available, ranged between 62 and 78 per cent. The average discount fare on the top 25 routes was \$161, a reduction of 54 per cent off the average economy fare of \$349.

FIGURE 7.2
Average Air Fares: Top Twenty-Five City-Pairs,
Second Quarter, 1987 - 1993



¹ A list of these routes is provided in Appendix B.1.

Affiliate Carrier Routes

On the 26 sample affiliate carrier routes², 23 per cent of the lowest fares reflected discounts of 50 to 60 per cent off the regular economy fare. Another 69 per cent showed discounts of 45 to 50 per cent. Deep discounts of more than 70 per cent were found on the London-Toronto, Vancouver-Williams Lake and Yarmouth-Halifax routes.

Since 1991, the average number of discounts available has declined. In 1993, the average number per route was five, a slight decrease from six per route in 1992. There were, however, routes such as Montreal-Moncton and Halifax-Sydney which, despite a reduction in number, still offered nine discount fares.

Other Mainline, Regional, and Local Routes

Examination of an additional 37 routes² comprising a variety of mainline, regional and local routes showed that the discount rate for 57 per cent of the lowest fares ranged between 45 and 50 per cent. Twenty-four per cent of the lowest fares ranged between 50 and 60 per cent in 1993, a decline from the 79 per cent of 1992. The deepest discounts found on these routes were 60 per cent while in 1992 discounts reached 75 per cent off the regular economy fare. The average number of discount fares per route decreased from five per route to four.

Northern Routes

On the 36 northern routes² examined, over 35 per cent of the lowest fares were discounted by 50 to 51 per cent. Fifty-two per cent of the lowest fares were discounted 45 to 50 per cent of the regular fare. No fares were found to be discounted more than 51 per cent on any of these routes. Survey results of the Agency's 1993 Northern Air Survey show that 64 per cent of respondents noted an increase in air fares. This rise was a significant factor for those deciding to change their usage of air transport.

The average number of discount fares offered on northern routes remained the same at five fares per route. Fifty per cent of the respondents of the northern survey reported that the number of discount fares available within their community or district had remained the same.

Cargo Rates

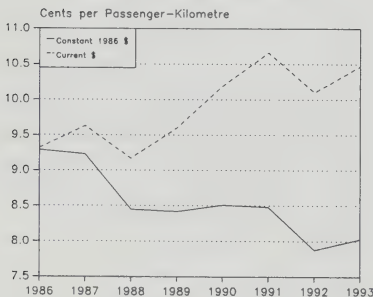
The Agency's Shippers Survey showed that 73 per cent of the respondents used air cargo services. For the majority of shippers, air cargo accounted for less than 10 per cent of their total volume of traffic.

² A list of these routes is provided in Appendix B.1.

Forty-eight per cent of shippers reported average rate increases of four per cent in both the domestic and transborder markets. Thirteen per cent of shippers said their cargo rates actually decreased in these markets by an average of seven per cent. Two thirds of the shippers indicated that there had been no change in air cargo rates in the Canada-Mexico market in 1993. Those shippers who noted changes in rates reported an average increase of four per cent. In the remaining international markets, 52 per cent of shippers said their rates had increased by an average of four per cent while nine per cent stated the cargo rates had decreased by an average four per cent.

Air cargo is crucial to northern and remote communities. Results of the Northern Air Survey indicate that 26 per cent of communities in the North were without access to any other mode of transport. Seventy per cent of respondents in communities where alternative modes of transport were available indicated that air cargo rates were not competitive. As in 1992, over 50 per cent reported an increase in cargo rates. This was reflected in the additional comments where one of the recurring themes included in the survey responses was increasing tariffs. Since the Agency's first survey of northern communities and Indian bands in 1988, respondents have continuously voiced their dissatisfaction with the cost of air transportation in the North.

FIGURE 7.3
Yields, Air Canada and Canadi*n



Yield

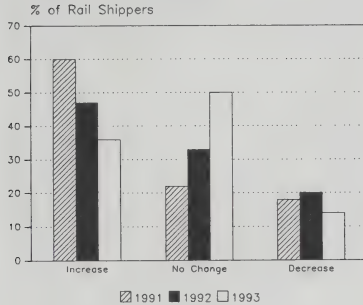
The overall impact of changes in business and economy fares, combined with the continual shifting discount structure, is measured by the total passenger revenue per passenger-kilometre, commonly referred to as yield. This measure reflects the system-wide fare mix for all passengers carried.

In 1993, the average yield for Air Canada and Canadi*n increased by 3.7 per cent from 1992. In real terms, the majors' average yield increased by 1.6 per cent (Figure 7.3). Domestic yields for both carriers improved by 7.7 per cent while international yields increased by 3.7 per cent. This follows decreases in 1992 of over four per cent in both markets. When measured in constant dollars, the average yield for domestic and international markets in 1993, increased by 5.9 per cent and 1.6 per cent respectively.

Average yields for the affiliate carriers have continued to be higher than those of the majors. Based on data for the first nine months of 1993, yields for affiliate carriers increased slightly from 1992.

Rail Services

FIGURE 7.4
Rail Rate Changes Reported by
Rail Shippers



Overall, during 1993, rates remained virtually unchanged with increases averaging less than one per cent. Shippers responding to the Agency's Shippers Survey reported an unweighted average³ rate increase over 1992 of 0.25 per cent for domestic and transborder rail traffic and an average rate increase of 0.12 per cent between Canada and Mexico. Forty per cent of shippers reported increases in their rail rates in 1993 which averaged approximately 3.0 per cent. Twenty per cent reported decreases in rates averaging 5.6 and 4.7 per cent for domestic and transborder rail services respectively. Another forty per cent of rail shippers indicated that their rail rates in 1993 were the same as in 1992.

For Canada-Mexico services, one out of every four rail shippers who reported using such services, stated that rates increased on average 2.5 per cent; one-twelfth benefitted from a decrease in rates which averaged 6.0 per cent while two-thirds reported no change in rates. Rate reductions were twice as large for medium and large shippers than for small shippers. The size of a shipper is determined by the amount of their annual freight bill. Annual freight bills total more than \$10 million for large shippers; range between \$1 and \$10 million for medium shippers; and total less than \$1 million for small shippers.

TABLE 7.1
Shippers' Response¹ to Proposed Rate Increases
by Carrier

	1988	1989	1990	1991	1992	1993
	<i>% of shippers responding</i>					
Absorbed Increase	25	31	34	39	28	34
Negotiated Reduction	36	31	35	38	36	57
Intra-Modal Carrier Switch	6	3	3	4	6	12
Inter-Modal Carrier Switch	15	13	12	19	19	11

¹Percentages reported do not add up to 100 because shippers could identify more than one action taken.

The survey found that when faced with rail rate increases, most shippers either tried to negotiate a reduction of the proposed increase or absorbed the increase (Table 7.1). Shippers who attempted to negotiate a

³ The average rate increase calculated from the Agency's shippers survey is an unweighted average. Shippers, irrespective of their size, volume of traffic, importance of transportation expenses, all have the same weight in the calculation of the rate increase.

reduction reported average rate increases of 2.9, 2.8 and 2.5 per cent respectively, in their domestic, transborder and Canada-Mexico rail services. Shippers who absorbed the increase reported average rate increases of 2.7, 3.5 and 2.5 per cent respectively, in the same market. Of these, large rail users reported lower average rate increases than small and medium rail shippers in the three markets. The option of switching to another mode of transport was exercised by 11 per cent of respondents in 1993, compared with 19 per cent in 1992.

Rail shippers with confidential contracts reported average increases that were marginally lower than those without contracts (0.5 per cent). Such lower rate increases were available to shippers regardless of the proportion of their company's rail traffic moved under contract, an observation that was valid in all three markets. In domestic rail services, respondents who increased the share of their company's 1993 traffic moving under contract reported rate reductions twice as large as those obtained by shippers who moved the same proportion in 1993 and 1992. In transborder markets, respondents who increased their company's traffic reported rates went up by only half the amount charged to those who shipped the same proportion in both years.

The majority (89 per cent) of shippers with confidential contracts reported that their contract rates were lower than published rates. This was the case for all sizes of shippers. A significant proportion of shippers who reported lower contract rates than published rates were from the following industries: paper and allied products; food products; refined petroleum; and coal products. Most shippers in these industries moved more than half of their rail traffic under contract. Generally, respondents who said that their confidential contract rates were lower than published rates moved more than half of their rail traffic under contract in 1993. Overall, about 71 per cent of respondents said that their contract rates were the same or lower than in 1992.

Rail Freight Rate WGTA Grain Movement

For the upcoming 1994/95 crop-year, freight rate scale for western grain movements under WGTA, including the government and shipper portions for an average movement of 1025-1050 miles, is based on the results of the 1992 Agency Costing Review and reflects changes since the 1992 base year in tonnage and labour, fuel, material and other input prices.

WGTA Cost Review

As part of its WGTA responsibilities, the Agency conducts costing reviews every four years. The table below summarizes the 1992 "base year costs" in comparison to those costs for the previous two costing reviews of 1984 and 1988. Included in the Table is pertinent information related to the base year costs, for average haul length for WGTA grain, the extent of the grain dependent mileage network and average costs.

Base Year Cost Comparison CN and CP Operations

	1984	1988	1992
Costs: (millions of dollars)			
volume-related variable costs	714.8	706.9	824.7
line-related variable costs	103.5	89.5	81.9
Total variable costs (\$)	818.3	796.4	906.6
Tonnage: (millions of tonnes)	32.06	31.4	35.15
# tonne miles (millions) *	29,366.9	30,677.8	36,134.2
Average volume cost/tonne (\$)	22.30	22.51	23.46
Average line cost/mile (\$)	14,523	13,497	13,613
Average volume cost/tonne-mile (cents/tonne-mile)	2.43	2.30	2.28
Mileages:			
average haul length**	916	977	1,028
grain dependent branch lines	7,127	6,631	6,016

* # tonne-miles = # tonnes x average haul length.

** based on average loaded miles per shipment.

Base Year Costs include adjustments for costs that will not recur. For example, in 1992, CN and CP's actual volume-related variable costs in moving western grain to export position totalled \$854.6 million. However, due to railway labour reduction plans and other non-recurring fuel and caboose costs, volume-related variable costs have been determined to be \$824.7 million for the base year 1992, a total adjustment of nearly \$30 million of non-recurring costs. In the case of line-related variable costs, non-recurring costs totalled nearly \$2 million.

From the Table, it can be seen that absolute costs vary with tonnage, length of haul and the extent by which the branch line network changes. The Table illustrates the relationship between costs and these factors more clearly in terms of average volume costs per tonne-mile.

As a result of the grain industry's and railways' efforts to improve the efficiency and productivity of grain handling and transportation, the average volume variable costs have dropped since 1984 from 2.43 cents per tonne-mile to 2.28 cents per tonne-mile, a reduction of 6.2 per cent.

Both railways have continued to rationalize their respective work forces in 1992 and 1993 and will continue throughout 1994. The non-recurring labour cost savings represent 3.2 per cent of the railways' variable costs for moving grain or nearly 10 per cent of the labour portion of variable costs. In 1992, labour costs comprised about 34 per cent of the railways' variable cost structure, down from slightly over 37 per cent in 1988.

TABLE 7.2
Unit Freight Cost Changes in Domestic Rail Services
Reported by Shippers

	1988	1989	1990	1991	1992	1993
Unit Freight Costs	<i>% of shippers responding</i>					
<i>Increase</i>						
13% +	0.4	0.3	0.7	0.0	0.4	0.0
9 - 12%	2.3	0.6	0.0	0.4	0.4	0.0
5 - 8%	11.0	11.7	12.6	10.4	2.9	3.1
1 - 4%	19.1	41.6	47.6	47.7	41.9	39.0
<i>No Change</i>	35.5	30.0	22.5	24.5	35.2	41.5
<i>Decrease</i>						
1 - 4%	13.4	6.6	9.2	10.0	9.6	7.5
5 - 8%	11.1	5.7	4.4	4.6	5.4	5.7
9 - 12%	3.0	1.9	1.1	1.6	2.1	1.9
13% +	4.2	1.6	1.9	0.8	2.1	1.3

Trucking Services

Slow economic recovery, overcapacity and fierce competition called for only small increases of TL and LTL trucking rates.

Trucking rates remained stable in 1993 with small increases in truckload (TL) and less-than-truckload (LTL) services in both domestic and transborder markets. The relatively stagnant rates were caused primarily by a slow economic recovery combined with industry overcapacity and fierce competition. Newcomers to the industry were exercising downward pressure on prices with their lower cost structure.

Results from the Agency's Motor Carrier Interview Program revealed that a small percentage of the carriers were able to obtain rate increases because of superior quality of service, an excellent track record on reliability or long term relationships with a shipper. This kind of emphasis on service quality was reported from shippers requiring seamless movements of raw materials and finished products. Carriers serving such shippers must perform consistently on a day-to-day basis and be able to maintain both their price structure and build-up good relations with shippers. Only a small proportion of carriers reported such long term relationships.

Some carriers were able to obtain rate increases through escalator clauses in their contractual arrangements with shippers whereby sudden increases of any cost elements not under the carrier's control, such as fuel or taxes, would be passed on. However, these contractual clauses are only found in a minority of cases where shippers and carriers have entered such long term agreements.

Shippers' Perspective

Truckload Services

Domestic Market

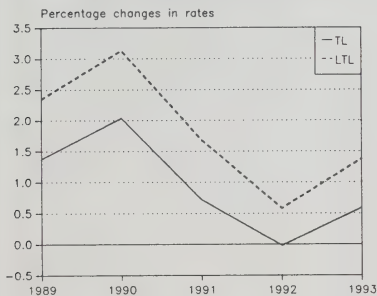
Table 7.3 shows the results of the Shippers' Survey on rates for the truckload segment of the industry since 1990. The information is based on "unit freight costs" which are used as a proxy for rates.

TABLE 7.3
Unit Freight Cost Changes in Truckload Services
Reported by Shippers

	Extra-Provincial Domestic				Transborder			
	1990	1991	1992	1993	1990	1991	1992	1993
Unit Freight Costs	% of shippers responding							
<i>Increase</i>								
13% +	0	0	0	0	0	0	0	1
9 - 12%	2	1	1	1	3	1	1	3
5 - 8%	22	11	3	5	20	9	7	5
1 - 4%	38	29	28	32	36	26	23	32
<i>No Change</i>	26	42	49	47	27	44	47	44
<i>Decrease</i>								
1 - 4%	6	10	11	9	6	10	11	9
5 - 8%	4	4	5	4	4	6	8	3
9 - 12%	1	2	1	1	2	2	1	2
13% +	1	1	2	1	2	2	2	1

FIGURE 7.5

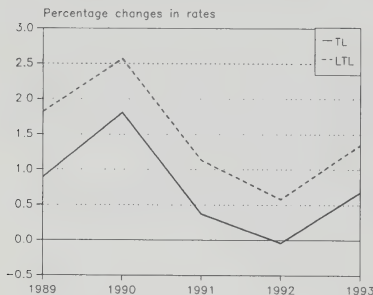
Average Rate Changes in
Domestic Trucking Services
Reported by Shippers (1989 - 1993)



Rates for domestic truckload services flattened out in 1993.

Nearly half (44 per cent) of the shippers who responded indicated no rate increases in 1993 for domestic services, although a significant minority (38 per cent) faced an increase. The increase, however, was modest given that it was reported to be mainly between one to four per cent. Rate increases were reported in the following industries: food products, wood, mining/oil, metal products, machinery, electric products and wholesale trade. The majority of the shippers reporting a rate decrease had a drop of less than four per cent in their rates; rubber and plastics products were two industries experiencing rate decreases. When compared to previous years, the trend indicates a stability in truckload domestic rates where reported increases are mainly in line with inflation. In 1993, there was a smaller proportion of shippers reporting rate decreases, suggesting that downward pressures on rates may have lessened in comparison with the two previous recessionary years.

FIGURE 7.6
Average Rate Changes in
Transborder Trucking Services
Reported by Shippers (1989 - 1993)



Transborder Market

Truckload rates in the transborder market can also be considered to have stabilized in 1993. The vast majority of shippers responding to the Agency's survey (85 per cent) reported that their international truckload rates either did not change, or reported increases or decreases within a range of one to four per cent (Table 7.3). In contrast, the proportion of shippers indicating a rate decrease of five per cent or more was at its lowest level since 1990.

This year the Mexican market was added to the survey. Although the number of respondents using truckload services to serve this particular market was small, the results showed a pattern similar to the one observed in the transborder market (94 per cent of responding shippers indicated either no rate change or small increase/decrease).

TABLE 7.4
Unit Freight Costs Changes in LTL Services
Reported by Shippers

	Extra-Provincial Domestic				Transborder			
	1990	1991	1992	1993	1990	1991	1992	1993
Unit Freight Costs	% of shippers responding							
<i>Increase</i>								
13% +	1	0	0	0	1	0	0	1
9 - 12%	3	1	0	1	4	2	1	3
5 - 8%	35	22	7	11	28	17	9	9
1 - 4%	34	35	39	39	33	29	35	37
<i>No Change</i>								
	19	28	38	39	25	37	40	39
<i>Decrease</i>								
1 - 4%	3	8	8	5	4	7	7	7
5 - 8%	4	3	4	4	3	5	3	2
9 - 12%	0	1	1	1	1	1	2	0
13% +	1	2	3	0	1	2	3	2

Less-Than-Truckload Services

Domestic Market

Thirty-nine per cent of the responding shippers reported no change in their LTL domestic rates in 1993 compared to 1992 (Table 7.4).

The number of shippers reporting modest increases and decreases between one to four per cent has remained relatively stable during both 1992 and 1993. More than half the shippers surveyed indicated that their

FIGURE 7.7
Average Rate Changes in Truckload Operations
Reported by Shippers (1989 - 1993)

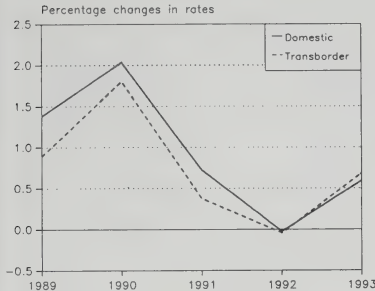
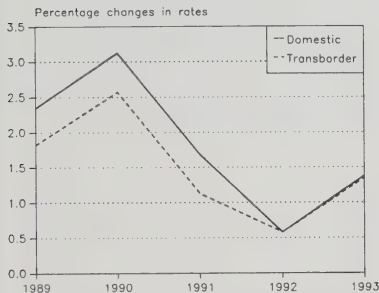


FIGURE 7.8
Average Rate Changes in
Less-Than-Truckload Operations
Reported by Shippers (1989 - 1993)



1993 rates had increased over 1992. Shippers confronted with rate increases came from all sectors of the economy and all size of shippers were affected. Fewer than 10 per cent of shippers surveyed benefitted from lower LTL rates in 1993 than in 1992.

Compared to 1992, more LTL shippers faced increases in their LTL domestic rates while fewer shippers reported falling rates.

Transborder Market

The trends in the transborder market were similar to domestic services. The proportion of shippers who reported that they had rate increases (50 per cent) was higher than the proportion reporting rate decreases (11 per cent). With the exception of the plastics industry, these rate changes applied to all sectors of the economy and affected all sizes of shippers. The 1993 survey results differed from 1992, with a higher proportion reporting LTL rate increases and a lower proportion reporting decreasing rates.

With respect to LTL services between Canada and Mexico, two thirds of the responding shippers reported no change in their unit freight costs while 22 per cent reported a small increase (one to four per cent).

TL vs LTL

The overall trends of TL and LTL rate levels are very similar in the domestic and international markets.

Carriers' Perspective

Truckload Services

Domestic Market

Table 7.5 presents information on rate changes as reported by carriers. This information is from the Agency's Motor Carrier Interview Program.

More than three quarters (76 per cent) of the carriers reported no change or minor changes to their price structure in 1993. In the Agency's sample, only 14 per cent reduced their rates by more than five per cent. These were mainly carriers based in the Maritimes, Ontario or Manitoba. Ten per cent of the carriers who were interviewed were able to increase their rates by more than four per cent. These were mainly the general freight operators. Carriers specializing in liquid bulk and dry bulk services reported that they were unable to change their rates in 1993 or managed to charge only marginal increases. Results reported for refrigerated services were similar to those reported by general freight operators. None of the liquid bulk service carriers managed to pass on rate increases beyond the one to four per cent range.

TABLE 7.5
Unit Freight Costs Changes in Services
Reported by Carriers

	Domestic Market		Transborder Market	
	TL	LTL	TL	LTL
Unit Freight Costs	<i>% of carriers responding</i>			
<i>Increase</i>				
13% +	3	6	4	9
9 - 12%	5	2	2	9
5 - 8%	2	9	2	9
1 - 4%	24	23	20	17
<i>No Change</i>	39	38	44	30
<i>Decrease</i>				
1 - 4%	13	8	14	9
5 - 8%	13	11	12	9
9 - 12%	2	4	2	9
13% +	0	0	0	0

Transborder Market

The transborder market and domestic operations experienced slightly different changes to the carriers' rate structures. The results of the 1993 Agency's Motor Carrier Interview Program showed a smaller proportion of carriers reporting rate increases in the transborder market than in the domestic market (28 versus 34 per cent). The proportion of carriers claiming no rate changes was higher for transborder operation. The same proportion of carriers reported rate decreases in transborder and domestic TL services.

Less-Than-Truckload Services

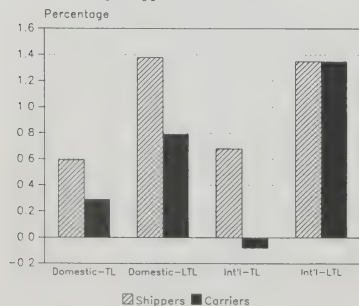
Domestic Market

Of the LTL carriers operating in the domestic market, 38 per cent indicated not having changed their rates in 1993, while 23 per cent were able to pass on increases in the one to four per cent range. Yet 17 per cent of the carriers reported that they increased their rates in 1993 by more than four per cent, a situation reported mostly for Quebec and Ontario-based carriers.

Transborder Market

Based on interview results, the most significant increases occurred in LTL transborder services. Twenty-seven per cent of the carriers

FIGURE 7.9
Average Rate Changes Reported in 1993
by Shippers and Carriers



interviewed operating in that market were able to increase their LTL rates by at least five per cent.

In general, shippers and carriers had different perceptions of rate changes, except in LTL international services. Shippers reported marginally higher rate increases, on average, than carriers (Figure 7.9).

Marine Services

Liner Trade

As competition on the major trade routes forced ocean rates down, carriers have been forced to re-examine the profitability of each segment of their services. As a result, conference tariffs now tend to identify and price each service component separately. Although this clarifies the cost structure for shippers, it has had an upward influence on shippers' total freight transportation charges.

Competition has narrowed the gap between conference and non-conference rates.

While non-conference carriers tend to offer rates lower than conference carriers, the gap continues to narrow. The current rates charged by independents almost mirror those of conference carriers. Some conferences and major independent carriers are adopting yield management systems, a technique borrowed from the airline industry, to maximize the revenue obtained for each container slot.

Freight Rate Indices for Major Trade Routes

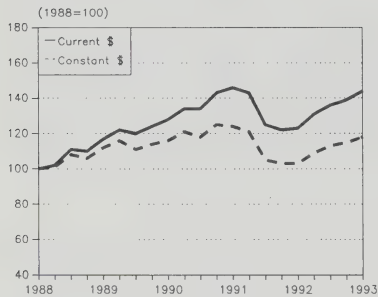
In a recent study of ocean transport, the Organization for Economic Cooperation and Development (OECD) stated "...published tariffs by no means reflect the amount actually paid by all shippers as the progressive development of service agreements combined with the right of independent action and significant outsider competition exercised downward pressure on actually paid rates." The use of published rates do, however, provide some insight into general rate trends over the 1988 to 1993 period.

The following freight rate indices apply to all-water and landbridge services connecting Canadian shippers with major markets in Europe and the Far East. Each index is based on a selected group of commodities for which conference tariffs were filed and tracked. Included are bunker adjustment factors (BAFs), currency adjustment factors (CAFs), and terminal handling charges (THCs). Changes are presented in both current and constant dollars, using 1988 as a base.

It should be noted that 1988 was a particularly poor year in the international shipping market as marine freight rates reached their lowest level in over a decade. While the indices show rates rising significantly over the subsequent five year period, in most cases they did not exceed levels recorded in the early 1980s.

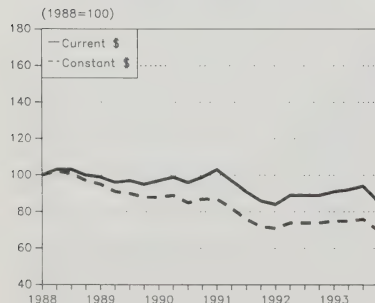
East-bound rates between Canada and UK/Continental Europe recovered in 1993.

FIGURE 7.10
Freight Rate Index
East Coast-U.K./Continental Europe



West-bound rates from U.K. and Continental Europe suffered from serious overcapacity throughout the 1988-1993 period.

FIGURE 7.11
Freight Rate Index
U.K./Continental Europe-East Coast



Canada-United Kingdom/Continental Europe Conferences

Rate levels in eastbound trade between Canada and U.K./Continental Europe rose by approximately 45 per cent over the five year period between 1988 and 1993. The rise was continuous until 1991, when trade on the north Atlantic collapsed in the recession that gripped both Europe and North America. As the supply of ships continued to outstrip the demand for shipping services in 1991, freight rates fell rapidly in the fierce competition for market share. This clearly illustrates the extreme sensitivity of ocean rates to changes in physical trade volumes, especially in the over-tonnaged North Atlantic market. Some rationalization of shipping services in 1992 and 1993 led to a subsequent recovery in tariff levels.

During this period, tariffs for woodpulp, paper and newsprint exhibited the strongest gains, rising by almost 55 per cent during the five years reviewed. Tariffs for some agricultural products tended to fall, likely due to the increasing use of bulk vessels for this traffic.

The westbound trades suffered from serious overcapacity and rates generally fell throughout the 1988-1993 period. The decline was particularly steep during 1991, with the recession affecting countries on both sides of the Atlantic. Attempts to rationalize services on the north Atlantic via the Trans Atlantic Agreement generally failed, as TAA members saw few options open for redeployment of their vessels. In spite of the continuing overcapacity on the route, rates appeared to stabilize and rise slightly in 1992 and 1993.

Both European and Canadian Terminal Handling charges increased by about 10 per cent in January, 1992 and remained at that level through 1993. Apart from a brief period in January, 1993, BAFs were not applied to rates on commodities moving on this trade route. CAFs changed quarterly depending on the strength of the Canadian dollar in international markets. Changes ranged from a 12 per cent surcharge in January of 1993 to a negative two per cent in April of the same year. The combination of BAFs, CAFs and THCs accounted for up to one third of total rates on this trade route in 1993.

Canada-Far East Conferences

Tariffs filed for goods shipped from Canada's west coast to Japan and Korea exhibited a continuous upward trend from 1988 to 1993. This was likely a result of increased demand for North American goods in the growing Far East economies, reflecting increases in their overall GNP and buying power. Transpacific west-bound rates were weak during the middle 1980s and these increasing tariffs indicate an attempt to regain lost revenues. Capacity on the Pacific is more stable than on other trade routes, allowing conferences to exert more influence on rates. Independent operators tend to follow conference initiatives in this area. While competitive pressures prevent excessive price increases, the overall

The balance of traffic and vessel capacity on transpacific routes has allowed increases in freight rates.

FIGURE 7.12
Freight Rate Index
West Coast-Far East

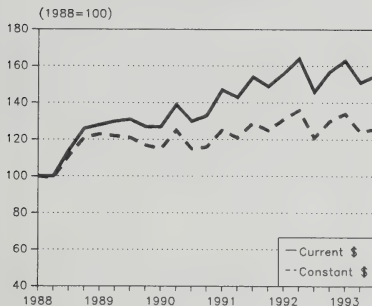
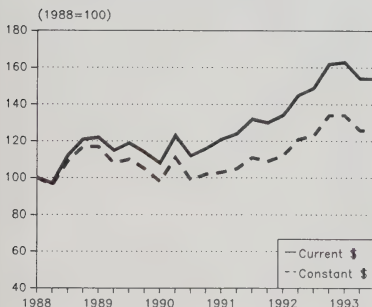


FIGURE 7.13
Freight Rate Index
East Coast-Far East (all-water)



balance of traffic and vessel capacity on transpacific routes has allowed for the continuous gradual increase in freight rates.

Port terminal charges imposed by the Canada Westbound Rate Agreement have risen only slightly over the past three years, about \$15 per annum per TEU (Twenty-foot Equivalent Unit). The rates have also been standardized, terminal costs are the same for all-water, inland point (IPI) and mini-landbridge shipments. Bunker Adjustment Factors (BAFs) ranged from \$96 per TEU during one quarter in 1992 to only \$16 per TEU during one quarter in 1993.

The single greatest influence on price fluctuations on the Canada to Japan trade route has been the Currency Adjustment Factor (CAF). This has risen from 28 per cent of the base rate in 1988 to 44 per cent by the fourth quarter of 1993.

All ancillary charges on rates to Korea, except for the CAF, have been the same as those charged in the Japan trade. The Korean CAF has hovered in the three to six per cent range for the past three years.

Tariffs filed for goods originating in eastern Canada for Japan and other Asian destinations mirrored the overall increase experienced by west coast shippers. On the all-water route from east coast ports, the rates were stable until 1990, when they began to increase steadily, rising as much as 45 per cent in 18 months.

The rates for mini-landbridge services from Toronto and Montreal rose steadily, although to a lesser degree than the all-water route.

Tariffs filed by the ANERA conference for cargoes from Korea to west coast Canada dropped sharply in early 1988, then rose steadily through to 1993, increasing by 35 per cent overall.

General rate increases of US\$275 per 40-foot container (FEU) announced in May, 1992 and US\$200 per FEU in May, 1993 appear to have been implemented both in standard conference rates and Independent Action rates for almost all commodities tracked. Surcharges on Korea to Canada shipments have not had a significant impact on rates.

Tariffs for Korean exports to eastern Canada followed a similar pattern to exports shipped to the west coast. Rates drop sharply in the 1988 base year, before commencing a gradual recovery over the following three years.

Overall Price Trends:

- 1) Transatlantic east-bound rates tended to rise with an increase in Canadian exports and the declining value of the Canadian dollar against European currencies; however, since the freight rates recorded for the base year 1988 were at almost record low

FIGURE 7.14
Freight Rate Index
Far East-East Coast (mini-landbridge)

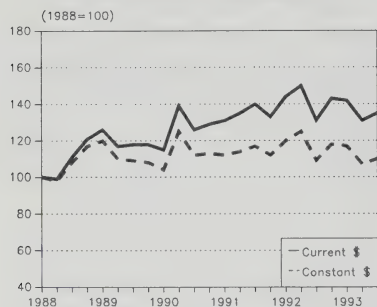


FIGURE 7.15
Freight Rate Index
Korea-West Coast

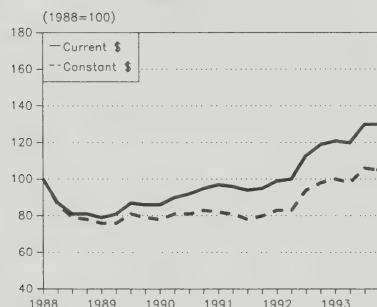
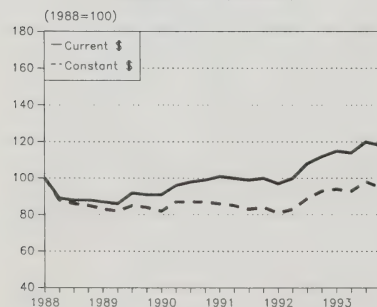


FIGURE 7.16
Freight Rate Index
Korea-East Coast (all-water)



levels, the subsequent rise in rates tends to exaggerate the real impact on shippers.

- 2) West-bound rates on the Atlantic declined due to severe overcapacity on these routes. The introduction of jumbo ships on transpacific routes in recent years has forced a redeployment of smaller, less competitive vessels to other trade routes, including Atlantic routes, and this has contributed to the relentless downward pressure on rates. The situation was aggravated by decreases in Canadian import traffic with the declining value of the dollar against European currencies.
- 3) Vessel capacity on the Pacific trade routes increased steadily during the 1980s, but liner operators did not undergo the prolonged slump in rates experienced by Atlantic operators. Transpacific traffic levels rose substantially, buoyed by strong growth in Asian economies and increasing exports to North America. Increased container capacity was readily absorbed and freight rates exhibited steady increases over the period.

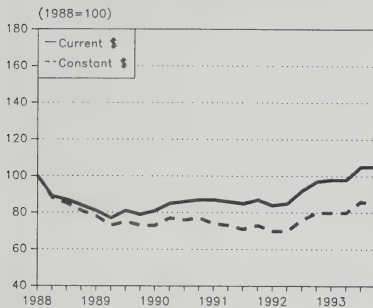
Survey of Freight Forwarders

In comparing conference and non-conference rates, a smaller proportion of forwarders importing cargo (65 per cent in 1993 versus 76 per cent in 1992) found non-conference operators offering lower rates than shipping conferences. A larger majority of 83 per cent, similar to 1992, reported that outbound non-conference ocean rates were lower than those of conference member lines. The rate difference reported most often was between six and ten per cent on both inbound and outbound cargoes. A small minority of responding forwarders found conference rates to be lower than those charged by independents.

According to the 1993 survey results, 45 per cent of freight forwarders made frequent or exclusive use of non-conference rates while 41 per cent indicated frequent or exclusive use of standard conference tariff rates. Other price options, such as independent action rates and service contract rates were reported to have been used, but far less frequently, by 17 per cent and seven per cent of responding forwarders, respectively. I/A rates appear to have been more easily obtained for export trade.

FIGURE 7.17
Freight Rate Index

Korea-East Coast (mini-landbridge)



The Canadian Shippers' Council

In its 1993 annual report to the Minister of Transport, the Canadian Shippers' Council (CSC) expressed disappointment with the recommendations of both the National Transportation Act Review Commission and the Standing Committee on Transportation, that the *Shipping Conferences Exemption Act, 1987 (SCEA)* be retained until anti-trust legislation was repealed in the U.S. The CSC advocates the immediate abolition of this legislation, linking it to "an outdated and less than market responsive shipping cartel system."

The CSC claimed that liner conferences were increasing freight revenues through ancillary charges and surcharges, and that there are no provisions in *SCEA* to prevent inordinate increases in these non-negotiable, secondary charges since they are not part of the basic freight rate. The CSC pursued two complaints with the Agency in 1992-93, both of which were related to the imposition of surcharges by conferences. Neither case was resolved to the Council's satisfaction, reinforcing its negative views on *SCEA*.

(continued)

Survey of Shipping Conferences

Survey response included 16 conferences offering services to Canada in 1993, both inbound and outbound; two thirds of conferences called directly at Canadian ports, while one-third offered services through U.S. ports.

Only half of the responding conferences announced a General Rate Increase (GRI) in 1993. Selected rate increases were more numerous than in 1992, although these were reported by only one third of respondents in 1993. Market demand conditions were identified as the greatest contributing factor to price increases. Other contributing factors were carrier supply conditions, capital costs and operating costs.

In 1992, 55 per cent of respondents indicated that, on average, their rates had decreased over the previous year. In 1993, this percentage dropped to 36 per cent. Rate decreases were attributed primarily to non-conference and members' competition as well as general market conditions.

Almost all respondents received up to 50 requests from shippers or shippers' associations for rate reductions, with one conference reporting over 100 requests. Requests for reduction of surcharges and ancillary charges were rare. Only four respondents agreed with 50 per cent or more requests for rate reductions. The most frequently accepted justifications for rate reductions were competition from non-conference operators, prevailing market conditions, competition from alternative routes, competition from foreign suppliers, and shippers entering a new market.

Almost 40 per cent of respondents reported less traffic moving on through rates in 1993 than in 1992. Another 40 per cent reported no change. For most respondents, the proportion of cargo tonnage moved on through rates did not exceed 60 per cent.

There was no reported use of Loyalty Contracts in 1993.

About half of the responding conferences received requests for service contracts in 1993, in most cases, less than 10. One conference reported more than 30 requests for service contracts. One half of the respondents reported signing service contracts with shippers in 1993, all on a conference-wide basis. Only one conference reported carrying over service contracts from 1992. The proportion of cargo moved under service contracts in 1993 did not exceed 35 per cent for any of the respondents.

Independent action (I/A) activity remained the same in 1993 for most respondents, although more than one-quarter reported it decreased. About half of the respondents reported filing I/A notices in 1993. In most cases, less than 10 were filed; however, one conference reported filing more than 1,000 I/A notices. In about half of the cases reported, I/A rates were six to ten per cent lower, on average, than the standard conference tariff, and even lower in another quarter of the cases. Almost half of the respondents reported moving no traffic under I/A rates. In most other cases, the proportion of traffic shipped under I/A did not exceed 35 per cent.

(continued)

The Council also noted certain impacts of the Trans Atlantic Agreement (TAA) on conferences serving Canada and pointed out an "intransigency on freight rates" experienced by Canadian shippers exporting through U.S. ports. The CSC echoed the British Shippers Council's strong opposition to the TAA and raised the prospect of Canadian shippers using their combined traffic volumes in future bargaining with conference carriers.

FIGURE 7.18
Freight Rate Index - Export Grain
East Coast Canada

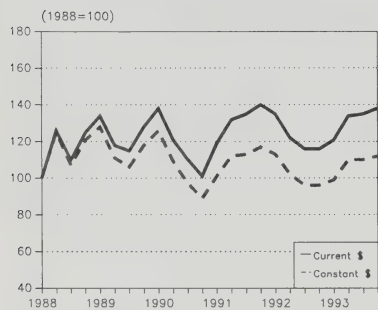
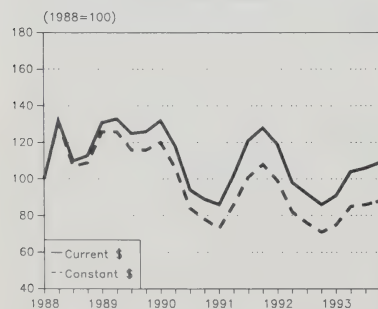


FIGURE 7.19
Freight Rate Index - Export Coal and Grain
West Coast Canada



Bulk Freight - International

There are no rates, as such, for bulk freight; prices for shipment of these commodities consist of the costs of chartering or contracting the ship involved, referred to as vessel "fixtures".

The indices presented in Figures 7.18 to 7.20 track changes in the level for freight fixtures for three major Canadian bulk exports, that is, grain, coal and iron ore. They are based on prices quoted for vessels on various trade routes coupled with corresponding vessel rates in the time-charter market. Since these price levels are volatile in the short term, it is more useful to examine overall trends on an annual basis.

Vessel rates for grain exports loaded at eastern Canadian ports exhibit the normal seasonal fluctuation associated with the grain shipping cycle. Over the five-year period, however, prices increased in spite of substantial declines in export grain shipments. The smaller, "handy-size" vessels (15,000 to 40,000 dwt) used for east coast grain exports are inherently more flexible in terms of deployment, and in the general decline in world demand for shipping through the 1980s, rates for these ships have not suffered the massive deterioration experienced by the operators of much larger and more specialized "cape-size" bulk carriers (+165,000 dwt). Rising operating costs created upward pressure on prices for handy-size vessels, especially after 1990. The apparent strengthening of prices in 1993 is likely a reflection of increasing requirements for smaller vessels in the Chinese import and export trade.

Coal and grain exports from the Canadian west coast are carried mainly in "panamax" vessels, with some coal moving in cape-size ships. Vessel rates for grain shipments were fairly steady from 1988 to 1990, supported by large export movements to Far East customers; however, substantial vessel capacity was freed up in 1992 forcing prices down. Overall, vessel rates for grain shipments mitigated the volatility of the corresponding prices for coal traffic.

Iron ore exports from eastern Canada are carried primarily in cape-size vessels, although occasionally panamax vessels (55,000 to 80,000 dwt) are also used. While the large cape-size vessels offer efficiencies of scale, they are extremely inflexible and can only be employed effectively on particular high-volume trade routes. Rates for these vessels tend to be volatile due to the precarious nature of the balance of vessel supply and demand.

After the severe decline in the mid-1980s, cape-size rates were relatively strong in 1989 and 1990; however, the subsequent slump in the steel industries in Japan, the U.S. and Europe freed considerable vessel capacity and Canadian exporters benefitted from vessel rates which reached the lowest levels in a decade.

FIGURE 7.20
Freight Rate Index - Export Iron Ore
East Coast Canada

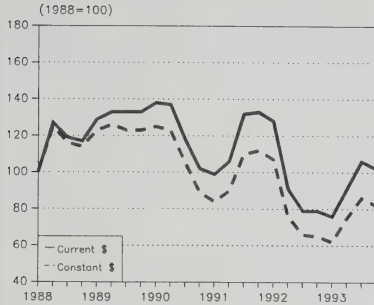
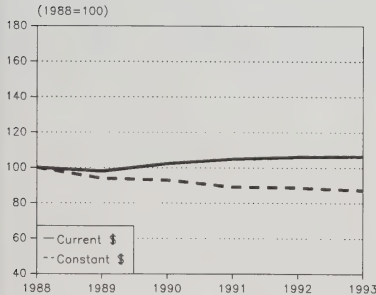


FIGURE 7.21
Great Lakes/St. Lawrence Freight Rate Index
1988 - 1993



Bulk Freight - Domestic

Unlike the international bulk shipping market, there is no central market in the domestic trades for the establishment of transparent charter rates. Domestic marine carriers are all privately-owned and controlled, and do not publish information on their vessel rates.

Major commodities such as grain, coal and ore are carried under long-term contracts with stable rate frameworks. For some cargoes, these contracts were signed before 1988, and no price changes have occurred since that time. The index in Figure 7.21 is based on a combination of carrier and shipper information, and indicates the change in overall bulk freight prices on the Great Lakes/St. Lawrence system.

Price levels have remained stagnant on the Great Lakes/St. Lawrence system during the past five years. Charter rates for iron ore have not changed significantly in over seven years, while coal has exhibited only modest gains. The rates paid for the movement of grain to lower St. Lawrence River ports has risen at less than one per cent per year since 1988.

In the other domestic trades on the east and west coasts, vessel charter rates have also been held in check by the pressures on shippers to control their total freight transportation costs and by competition from rail and truck operators for cargoes of pulp, forest products and petroleum.

*Overall price increases
reported were relatively small
in 1993*

Shippers' Survey

Over half of all respondents to the Survey indicated that they use marine transport for outbound shipments, with off shore shipments about double those moving to domestic and North American markets. Over 40 per cent of all respondents received inbound cargo by water, with about three-quarters of these sources off shore.

The overall average price increase reported by shippers for domestic marine transport was 2.3 per cent; for Canada-U.S. traffic 0.8 per cent, and for international (off shore) traffic 1.1 per cent.

When faced with marine transportation rate increases, one third of respondents negotiated a lower increase, while another third absorbed the increase. Of the remainder, some were able to pass the increase on by raising their own prices, while others either switched modes and/or transportation companies or dropped out of the market.

Over 20 per cent of respondents, reported shipping substantial portions of their liner traffic under service contracts with shipping conferences in 1993. The service contracts were evenly distributed between outbound and inbound traffic.

Over 30 per cent of respondents, reported shipping substantial amounts of their liner traffic under Independent Action rates with conference member lines. There were more of these rates reported for outbound than for inbound traffic.

EMPLOYMENT

Highlights of 1993

Level of Employment

Restructuring by carriers affected transportation employment, influencing the number of employees and/or labour expenditures.

The number of employees came down in Canadian air, rail and trucking services but increased in water transportation.

Compared to U.S. employment levels, Canadian carriers in all four modes reduced their number of employees more rapidly than their U.S. counterparts between 1988 and 1993.

Average Weekly Earnings

With the exception of a decline in weekly earnings reported in air services, an increase greater than inflation was noted in the three other modes. Between 1988 and 1993, only trucking showed an annual increase in weekly earnings inferior in Canada than in the U.S.

Wage Settlements

Financial results of carriers dictated wage settlements.

Strikes and Lockouts

Strikes and lockouts have not been a major disturbing factor, yet they influenced some regional economies (for example, BC Rail, Air Alliance).

Introduction

In 1993, business restructuring continued within the transportation sector, fuelled mainly by the need to restore competitiveness, and profitability. Like other sectors, the Canadian transportation industry is struggling to adjust to the effects of the recession and the slow recovery. In 1993, restructuring initiatives and plans took one or more of the following forms:

- corporate restructuring, including executive restructuring;
- changes to operations:
 - changes to the services offered:
 - . dropping marginal non-profitable services;
 - . reducing capacity;
 - . consolidating/centralizing some functions, for example, customer services, ticketing;
 - . contracting out some function(s);
 - take over of another carrier's operations:
 - . through merger/acquisition;
 - . take over of the operations of a financially troubled carrier;
 - creation of a distinct division.

Employment in the transportation industry was affected by carriers' restructuring initiatives.

These restructuring initiatives all had something in common: an impact on transportation employment -- on the actual number of employees and/or on labour expenditures. With labour expenditures accounting for at least a third of transport costs, many restructuring initiatives adopted or planned in 1993 did target, directly or indirectly, labour expenditures in at least one of the following three ways:

- reduction of actual number of employees;
- reduction of amount spent on labour;
- productivity enhancement.

A number of approaches were used to reduce the number of employees:

- buy-out offers;
- early retirement packages;
- attrition;
- layoffs.

In addition to reducing the workforce, a number of transportation companies adopted measures to reduce labour expenditures:

- wage concessions:
 - . wage freeze;
 - . wage rollback;
 - . mix of wage freeze and wage rollback;
- wage concessions in exchange for:
 - . job security provisions/policy;

- an ownership interest;
- changes to employees' benefits.

Productivity-enhancement measures, either adopted or proposed, were aimed at modifying work rules to achieve greater flexibility.

This section looks at employment levels as well as average weekly earnings by modes of transportation. It includes a comparison of Canada-U.S. employment and earnings by mode emphasizing differences in trends and relative changes over time. The next section looks at labour productivity, followed by sections on management-labour relations and strikes and lockouts.

Employment

Based on preliminary 1993 data from Statistics Canada's Labour Force Survey, employment grew marginally by 0.3 per cent. The most significant rate of growth in employment was noted in forestry (+7.3 per cent), followed by the service sectors (+1.5 per cent) and wholesale and retail trade (+1.1 per cent). Mining, manufacturing, construction, finance and public administration sectors all reduced employment in 1993. Employment losses in those sectors indicate the magnitude of restructuring still taking place within the Canadian economy during the year.

As for the four modal transportation activities covered by this review, employment growth occurred only in water transportation services (+6.5 per cent). All three other modes reduced their workplace in 1993. According to Statistics Canada's Labour Force Survey results, the reduction in employment was 2.9 per cent in air services, four per cent in rail services and 0.5 per cent in trucking operations. The number of people employed in other transportation activities not covered by this review, such as urban transit and taxi services, increased in 1993.

On a regional basis, total transportation employment grew in 1993 in Newfoundland, Prince Edward Island, New Brunswick, Quebec, Manitoba and British Columbia. All other provinces and the Territories, experienced lower employment levels in transportation compared to the previous year.

Between 1988 and 1993 transportation employment, for the country as a whole, grew only in 1989 and 1990. Since 1990, employment in transportation has been declining every year. On a regional basis, the trend over that same period has varied significantly from one province to another, depending on the performance of the provincial economy and carriers' decisions as to where to locate part or all of their operations.

Liberalization of trade between Canada and the United States fuelled the development of more integrated transportation systems in the two countries, leading to more competition between the two systems. Tables

The number of employees in air, rail and trucking transportation came down in 1993.

The level of employment within transportation has been declining since 1990.

8.1 and 8.2 summarize the major trends for transportation employment in the four modes on each side of the border.

In rail services, both countries saw a reduction in employment has been observed in both countries. Over the period 1983 to 1987, U.S. railways were reducing their employment more rapidly than Canadian railways. The trend reversed between 1988 and 1993 with Canadian railways cutting employment more rapidly than their U.S. counterparts. Yet, over the years 1983 to 1993, the rate of reduction in rail employment in the U.S. and in Canada was comparable.

TABLE 8.1

Annual Percentage Rate of Changes in Transportation Employment by Mode in Canada and in the U.S.

	Mode of Transportation							
	Rail		Trucking		Air		Water	
	Can	US	Can	US	Can	US	Can	US
1983-1987	(3.9)	(5.3)	1.3	3.6	2.5	5.2	(3.7)	(1.9)
1988-1993	(3.1)	(2.3)	(1.8)	0.9	(1.3)	2.6	(2.6)	(0.4)
1983-1993	(3.7)	(4.0)	(0.1)	2.6	1.1	4.5	(2.9)	(1.1)

Note: () Indicates negative figures.

Between 1983 and 1993, truck, air and water transportation employment either grew at a slower pace or declined at a faster pace in Canada than in the U.S.

In trucking operations within Canada, the number of employees increased until 1989. Between 1988 and 1993, negative employment growth was observed in Canada's trucking sector while in the U.S., trucking employment grew marginally. Over the period 1983 to 1993, trucking employment in Canada decreased while it increased in the U.S. (on average, by 2.6 per cent less annually).

In the Canadian air transport industry, employment grew between 1983 to 1987 and declined from 1988 to 1993. In the U.S., employment growth was seen in both periods, with slower growth from 1988 to 1993. For the entire period covering 1983 to 1993, air transportation employment in Canada increased less than within the U.S. air transport industry. In Canada, employment in air transportation activity declined between 1988 and 1993 at an average annual rate of 1.3 per cent.

In the water transport industry, both Canada and the U.S. saw employment declines. Canada's employment reduction was proportionally greater in Canada than in the U.S.

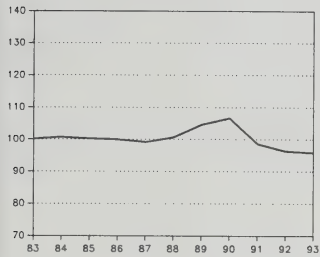
TRENDS IN TRANSPORTATION EMPLOYMENT WITHIN CANADA

1983 to 1993

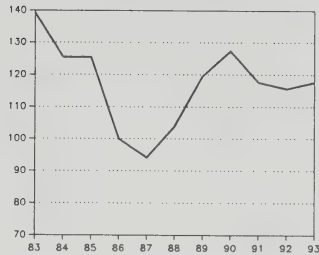
1986 = 100

(Preliminary data for 1993)

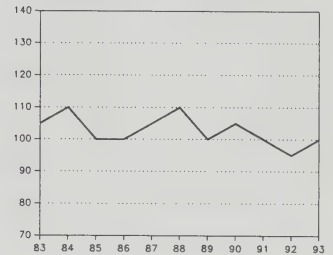
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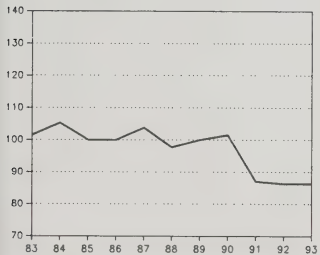
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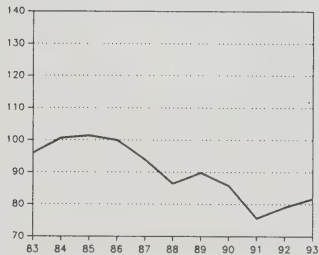
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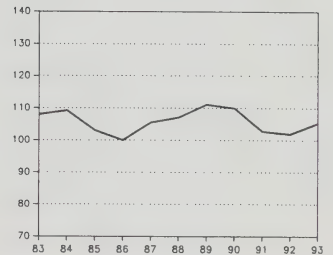
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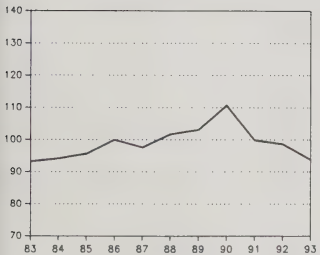
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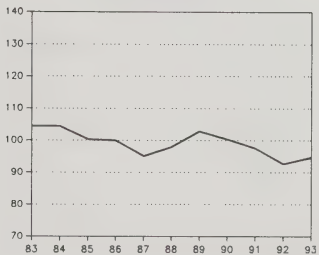
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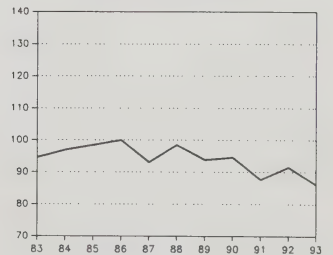
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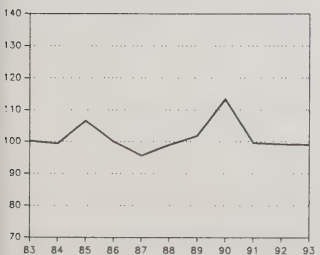
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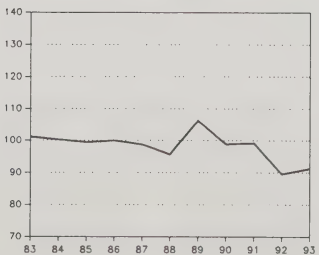
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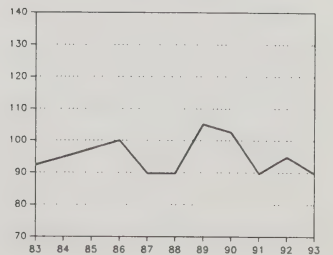
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BRITISH COLUMBIA

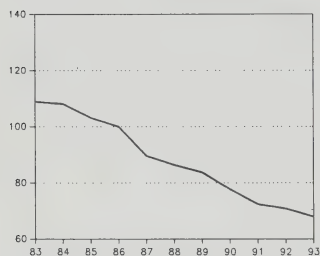


TERRITORIES

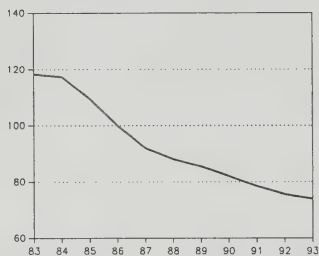


**EMPLOYMENT TRENDS BY MODE OF TRANSPORTATION
A CANADA - U.S. COMPARISON
1986 = 100**

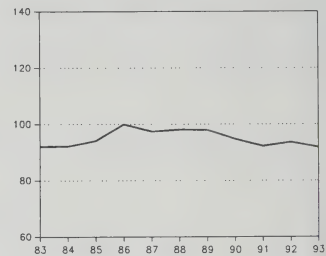
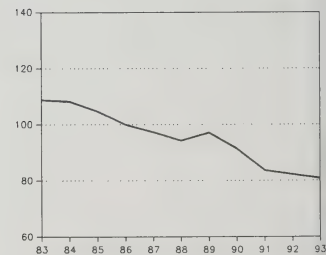
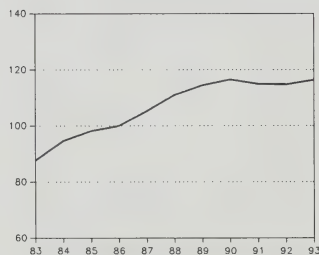
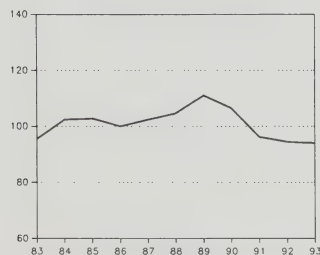
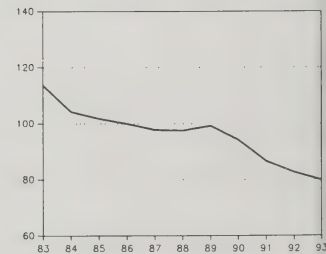
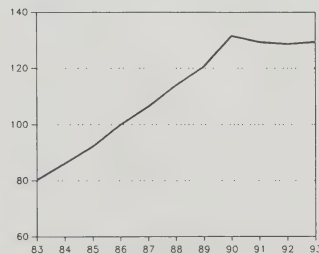
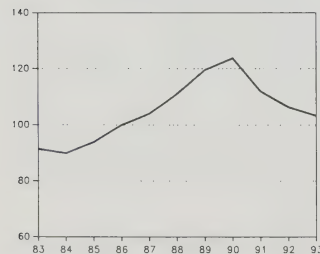
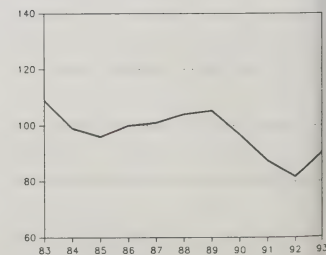
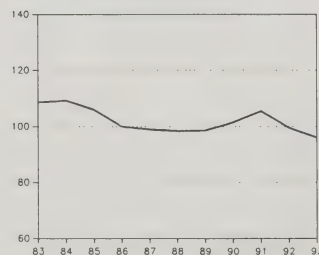
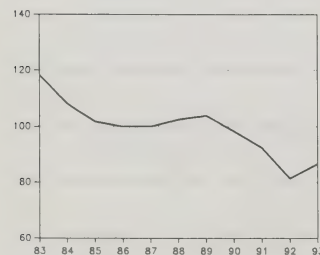
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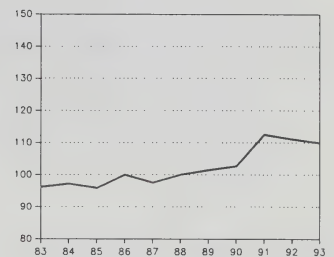
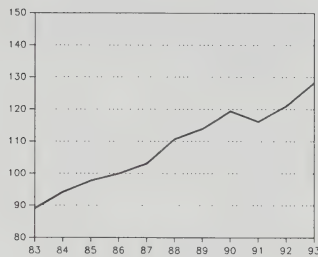
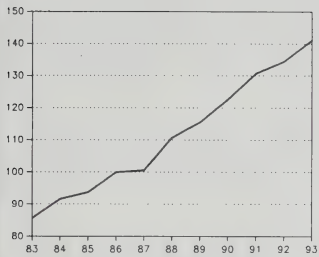
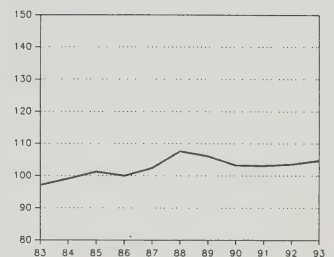
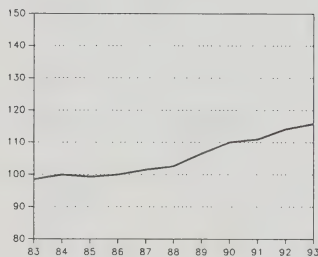
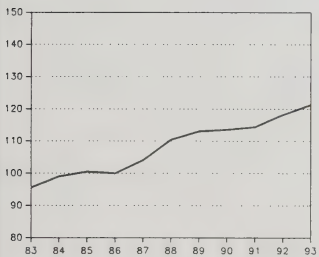
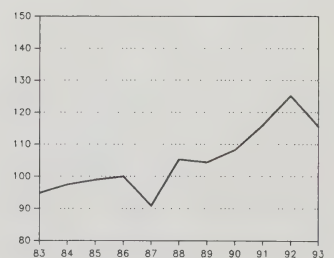
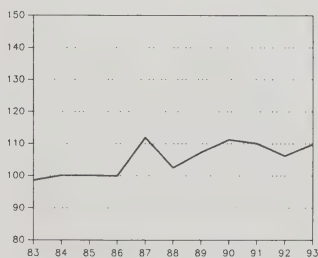
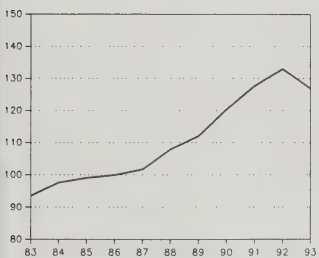
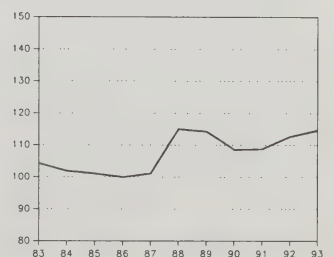
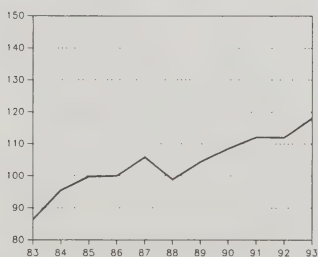
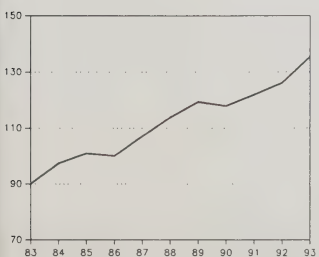
UNITED STATES

Rail Transportation

CANADA IN RELATION TO U.S.

*Trucking**Air Transportation**Water Transportation*

**TRENDS IN AVERAGE WEEKLY EARNINGS PAID IN EACH MODE OF TRANSPORTATION
A CANADA - U.S. COMPARISON
1986 = 100**

CANADA**UNITED STATES****CANADA IN RELATION TO U.S.***Rail Transportation**Trucking**Air Transportation**Water Transportation*

Labour Compensation - Earnings

Average weekly earnings increases in rail, trucking and water transportation surpassed inflation while a reduction of earnings was reported in air transportation.

Preliminary 1993 data from Statistics Canada's Labour Survey showed a marginal increase (1.7 per cent) in average weekly earnings in Canada. The marine transport sector shows the largest increase in average weekly earnings at 7.4 per cent. Next was the finance sector with a 5.2 per cent increase. In the forestry, mining, manufacturing, and public administration sector, increases in average weekly in 1993 were just over two per cent.

In transportation, weekly earnings increased by 1.8 per cent in 1993. In rail services, the increase was 4.9 per cent, compared to 2.6 per cent in trucking. In air, average weekly earnings came down by 4.5 per cent in 1993.

Comparisons of the average weekly earnings paid in each mode in Canada and in the U.S. were not done in absolute terms but in terms of rates of changes over time, because of fluctuations in the currencies.

TABLE 8.2

Annual Percentage Rate of Changes in Average Weekly Earnings by Mode in Canada and in the U.S.

	Mode of Transportation							
	Rail		Trucking		Air		Water	
	Can	US	Can	US	Can	US	Can	US
1983-1987	3.0	2.8	1.7	0.6	1.6	2.6	3.4	3.9
1988-1993	5.1	2.9	1.8	2.2	3.2	1.2	3.6	3.2
1983-1993	5.0	3.6	2.3	1.6	3.0	1.0	4.1	2.9

In rail services, the rate of growth in average weekly earnings has been higher in Canada than in the U.S. Leaving out the currency factor weekly earnings of rail employees in Canada have increased at a faster pace than in the U.S. over the 1983 to 1993 period. This difference is significant considering that U.S. and Canadian railways were reducing employment at roughly the same pace over that period.

In trucking, average weekly earnings grew from 1983 to 1987, at a slower rate in the U.S. than in Canada. After 1988, the reverse situation was seen. Since the *MVTA, 1987* came into force, earnings of employees in Canadian trucking firms have been moving towards earnings of U.S. truckers. The marginal increase in Canadian trucking earnings compared to U.S. earnings between 1983 and 1993 is offset by the fact that trucking employment in Canada has been increasing at a slower rate than in the U.S.

Wage settlements negotiated in 1993 within the transport sectors resulted in salaries being either frozen, rolled back, or marginally increased.

In the air and marine transport industries, Canadian average weekly earnings grew more rapidly than the U.S. average between 1988 and 1993. However, they grew less rapidly than average earnings in the U.S. between 1983 and 1987. In both modes, employment in Canada decreased relative to the U.S. over the 1983-1993 period.

During 1993, a number of wage settlements negotiated in the four modes of transportation resulted in the following average annual wage increases:

Rail	+2.8 %
Trucking	+1.0 %
Air	+0.1 %
Marine	+1.5 %

Competitors' labour-related initiatives are quickly copied by others.

In rail, BC Rail negotiated a three-year contract with its engineers while CN went for two-year deals with its locomotive engineers. In trucking, wage settlements were reported by: Motor Transport, Transport Provost, Transport Cabano, Association du camionnage du Québec and CanPar Transport. The duration of the 1993 settlements within the trucking sector varied between 24 and 42 months. In air transportation, Air Canada, Canadian Airlines International and the Government of Canada (pilots) reached wage settlements in 1993 covering periods ranging between 12 and 36 months. For the air transport industry, the most significant 1993 wage settlement was the wage rollback accepted first by Canadian employees and then by some Air Canada employees in consideration of the financial situation of their employer. These initiatives clearly showed that actions by a competitor had to be matched if carriers wanted to maintain relative competitive positions in the marketplace. In water transportation, BC Ferry Corporation and the Government of Canada (ships officers) negotiated two-year wage settlements.

Labour Productivity

Trends in employment levels and average weekly earnings are two of the variables relevant to a discussion of employment. To complete the picture, it is important to address the question of how efficiently employees are utilized, both in absolute and relative terms. This notion of labour efficiency, called labour productivity, remains a partial measure of efficiency. Delivering a transport service requires other factors of production which are not taken into account. Changes in labour productivity are also affected by changes of input mix as well as by changes in productive efficiency. Only labour productivity is addressed in this report.

Labour productivity within transportation industries from 1961 to 1993 has been following an upward trend with some periods of declines. This pattern is comparable to the one seen in other broad industries. An upward trend in labour productivity was also observed in both goods-producing and services-producing industries. In the transportation

FIGURE 8.1

Level I to III Air Carrier
Total Operating Revenues per Employee

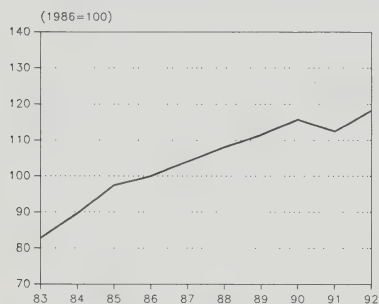
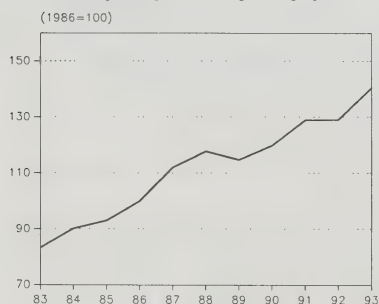


FIGURE 8.2

Class I Railways
Total Operating Revenues per Employee



industry, the most recent period of decline labour productivity decline occurred between 1988 and 1991. While there are similarities the changes in labour productivity in transportation have been somewhat more erratic than in goods- and services-producing industries.

TABLE 8.3

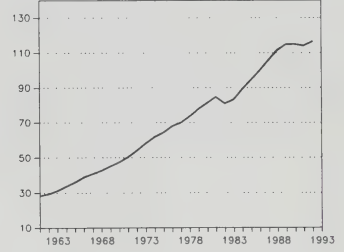
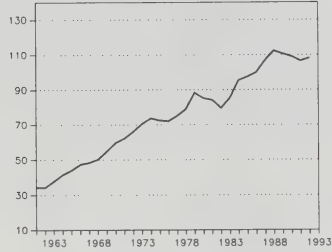
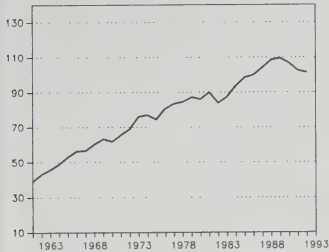
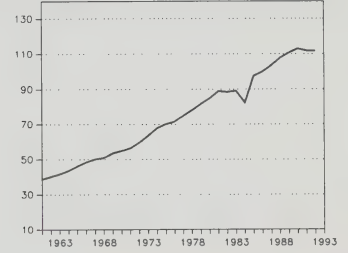
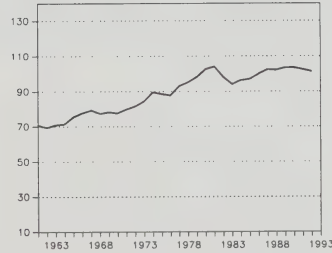
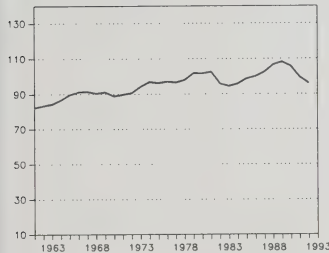
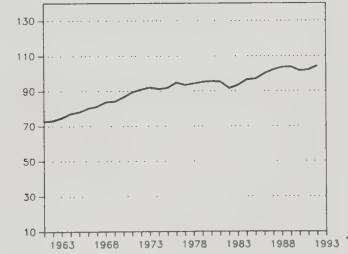
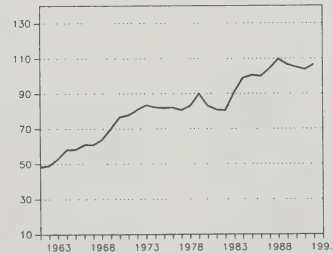
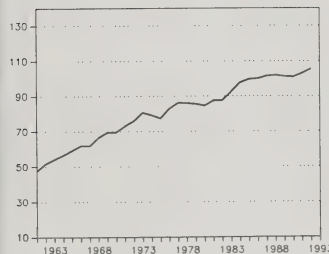
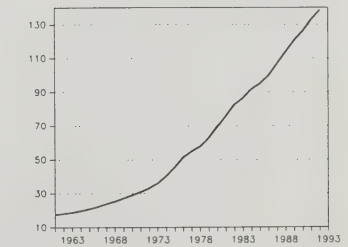
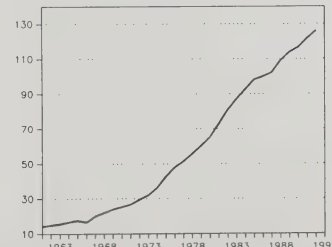
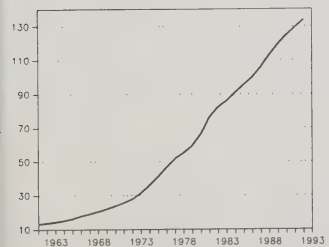
Average Annual Rate of Changes (%) Observed in Selected Industries, 1961 to 1992

	Goods-Producing Industries	Transportation Industries	Services-Producing Industries
Output	1.9	2.3	2.8
Employment	0.4	1.0	2.3
Output per employee	1.8	1.8	1.0
Labour compensation per employee	3.7	3.5	3.8

Over the period 1961 to 1992, the output of the transportation industry grew at the average annual rate of 2.3 per cent. This compares to 1.0 per cent growth for employees, 1.8 per cent for the output per employee and 3.5 per cent for the increase in labour compensation per employee. In other words, average-annual growth in labour compensation between 1961 and 1992 in the transportation industry exceeded the growth in the industry's output, which in turn surpassed labour-productivity growth. A similar situation was observed for goods-producing industries. In services-producing industries, labour compensation over the same period also grew more rapidly than labour productivity, however there is a significant difference. Services industries played a growing part in the expansion of the economy, accounting for a growing share of the GDP. This explains why, of the three major industries reviewed here, services benefited from the highest rate of growth in both employment and output over the 1961 to 1992 period.

Labour productivity for air and rail transport was measured in terms of total operating revenues per employee and was indexed with 1986 as the base year. The improvement in Class I railways' labour productivity between 1983 and 1992 surpassed the performance by level I to III air carriers as indicated by Figures 8.1 and 8.2.

LABOUR PRODUCTIVITY AND COSTS FOR SELECTED INDUSTRIES
1961 to 1993
1986 = 100

GOODS-PRODUCING INDUSTRIES**TRANSPORTATION****SERVICES-PRODUCING INDUSTRIES***Output**Persons Employed**Output per Person Employed**Labour Compensation per Person Employed*

Education Program for Natives

The First Nations Technical Institute (FNTI) of Deseronto has developed with Bearskin Airlines of Thunder Bay an education program for native learners in Ontario whereby graduates of the program are entitled to take part in one-month job placement as cabin attendants on Bearskin flight operations in Northern Ontario. This cooperative education program is aimed at ensuring that native people in the North participate in the delivery of essential services to their communities.

Management-Labour Relations in Transportation

In return for some limited job security provision or policy, in agreements reached in 1993, workers accepted wage freezes, and, in some cases, even wage cuts. In the U.S., some major airlines (for example, United, Northwest, TransWorld) negotiated wage concessions in return for an ownership interest.

Even so, labour cost reduction remained a big and difficult challenge. Numerous carriers drop more and more services in non-profitable markets in 1993. In the U.S., employees' reactions to carriers' initiatives turned confrontational, for example, the American Airlines strike, and work-to-rule at United. On the other hand, while some employees in Canada resisted changes, the issues arose more at the micro-level. For instance, the relocations of employees resulting, for example, from consolidation of functions, became issues.

Circumstances affecting transportation firms were dictating management-labour relations.

In rail services, the consolidation of unions representing diverse employee groups, initiated in 1990 by CN and CP Rail with the Canada Labour Relations Board, was imitated by BC Rail in 1993. The CN and CP Rail union consolidation initiatives were not yet completed by the end of 1993 as unions challenged the carriers' initiatives on various grounds; for example, unions opposed on the grounds that their representation rights would be affected and, if successful, would violate the right of freedom of association. Decisions by the Canada Labour Relations Board in 1991, 1992 and 1993 upheld the consolidation process. One recent decision rendered by the Board concerned an application by the Council of Railway Unions for an amalgamated unit of shopcraft employees. Because the Council represented five of the six unions holding bargaining rights for the employees concerned, the Board dismissed the application on the ground that the Council did not represent the majority of the employees of the bargaining unit. Developments on these consolidation initiatives are expected soon as employees were voting early in 1994.

For the most part, restructuring in 1993 brought negative effects for employees through job cutting resulting from corporate and executive restructuring, wage freezes, and wage rollbacks. Nevertheless, these changes generated some positive results for Canadian employees. For instance, Air Canada's equity investment in Continental Airlines, a U.S. air carrier, permitted Air Canada to save jobs and to successfully bid for some of Continental's aircraft maintenance contracts.

A permanent national body called the Canadian Trucking Human Resources Council was created in 1993. The Council - a non-profit organization - is working to promote and support human resource development and training in the Canadian trucking industry.

Strikes and Lockouts

Of the four modes of transport reviewed in this report, in 1993, only rail experienced an increase in strikes and lockout activities over 1992. More cases were reported, involving more workers over more person-days. In 1993, strikes hit two railways: BC Rail, a British Columbia provincial Crown corporation and Essex Terminal Railway.

BC Rail, Essex Terminal Railways and Air Alliance faced strikes in 1993.

Since 1988, the first year of the economic regulatory reform legislation, the most controversial case within the Canadian air transport industry was the lockout of Nationair's flight attendants. The lockout began in 1991 and ended in 1993, prior to Nationair's failure. The carrier hired replacements for the locked-out employees and continued operating. Pilots at Air Alliance went on strike in 1993 to obtain parity with the working conditions of pilots with other Air Canada affiliated carriers. The strike completely shut down Air Alliance.

Strikes and Lockouts in 1993 within the Transportation Industry

Air Transport

Nationair Nolisair Inc., Mirabel (from 19 November 1991 to 24 February 1993)

Air Alliance (from 26 June 1993 to 31 July 1993)

Rail Transport

Essex Terminal Railway (from 9 January to 17 April 1993)

BC Rail (from 23 June to 24 August 1993)

Trucking

Auto Haulaway (from 14 to 25 January 1993)

A. Cupido Haulage Ltd. (from 22 February to 16 March 1993)

McCourt Cartage Ltd. (from 26 June 1992 to 26 April 1993)

Intercounty Milk Transport (started on 10 December 1993)

Water Transport

Westshore Terminals, Vancouver (from 29 March to 5 April 1993)

Westshore Terminals, Vancouver (from 15 to 16 April 1993)

1993 was a calm year for trucking with respect to strikes and lockouts. Only four cases were reported, none of which involved major carriers.

In the water transport industry, the two reported cases involved employees of Westshore Terminals at the Port of Vancouver.

Strikes and lockouts in transportation over the period 1978 to 1993 are summarized graphically. From the graphs, it can be inferred that management-labour relations have been relatively peaceful since 1988, a situation explained by the financial difficulties experienced by key transport firms during the period.

The biggest labour-related challenge facing the transportation industry is the establishment of harmonious relationships between employees and management. Both will need to approach the challenge facing their industry and the solutions required with the same vision. Recent experiences have demonstrated that work force adjustments involve paying out large sums of money over short periods of time. Consequently, "financing" the implementation of structural adjustment plans is an issue. With the globalization of world trade, Canada cannot afford to let management-labour conflicts impede the nation's trade position.

FINANCIAL PERFORMANCE

Highlights of 1993

Net Income

Overall, Canadian transportation industries generated a net loss, despite a reported net income in the last quarter.

Operating Ratios

The operating ratios of all major carriers improved slightly although Canadi*n's operating expenses still exceeded operating revenues.

Investments

Air Canada and Canadi*n invested in aircraft and engines while CN North America and CP Rail System undertook infrastructure projects. International shipping companies placed orders for new large-scale vessels.

Indebtedness

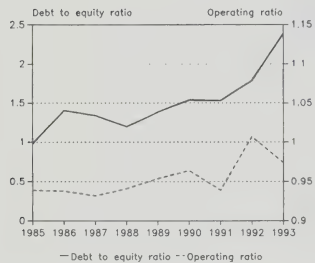
With high operating ratios, some major carriers raised new capital to sustain their activities and to avoid losing ground to their competitors. Interest expenses increased despite the decline in interest rates.

Restructuring

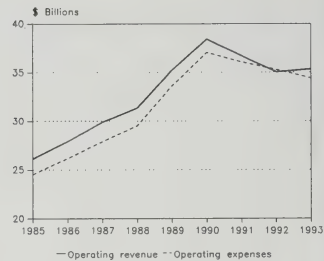
Canadian carriers restructured and rationalized to restore their financial situation and to ensure their survival.

KEY FINANCIAL INDICATORS BY MODE OF TRANSPORTATION

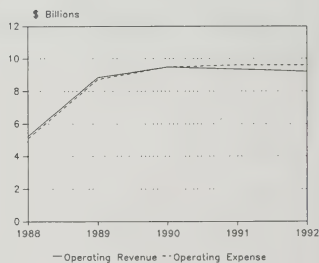
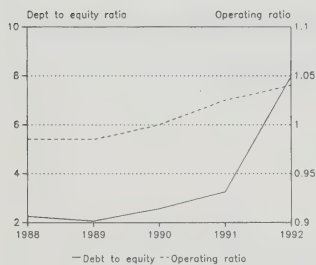
FINANCIAL RATIOS



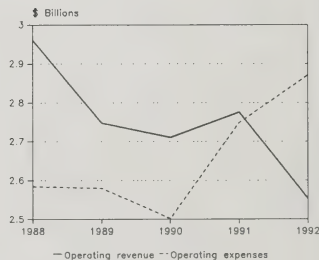
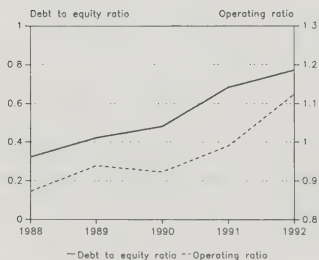
EXPENSES AND REVENUE



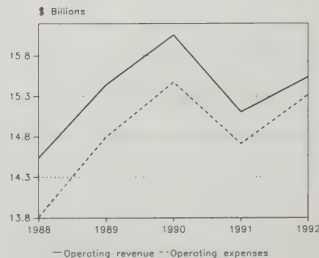
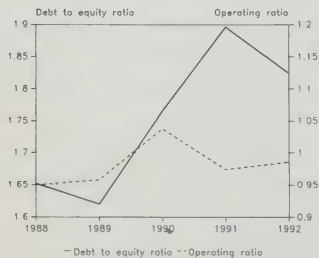
Air Transportation



Rail Transportation

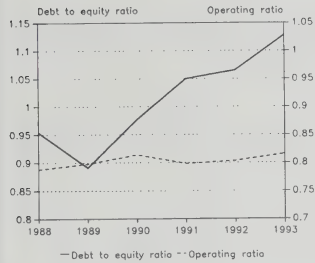


Truck Transportation (except petroleum) and other utilities



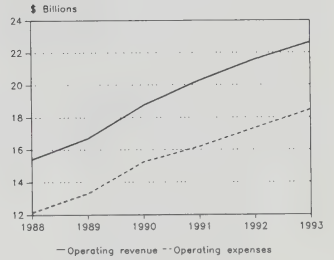
KEY FINANCIAL INDICATORS BY SECTOR

FINANCIAL RATIOS

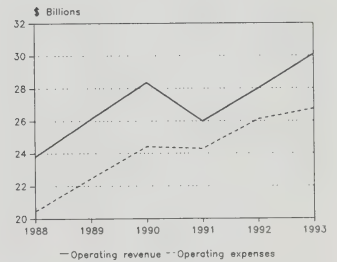
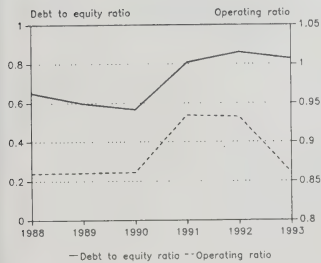


Communications

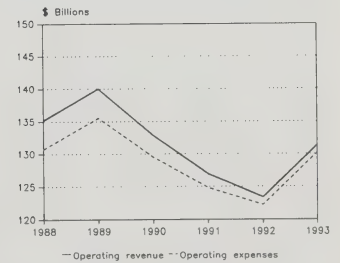
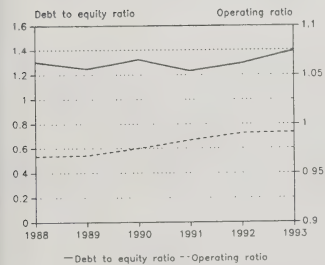
EXPENSES AND REVENUE



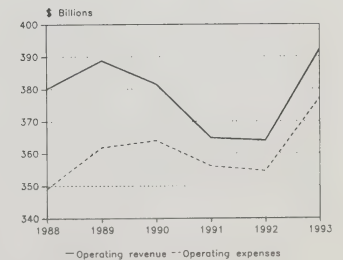
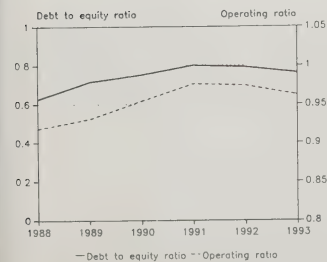
Mining



Wholesale Trade



Manufacturing



Introduction

This section compares the financial situation of the Canadian transportation industry to Canadian industries in general and with some particular components.

Operating revenues, operating expenses, operating income (loss), and net income (loss) are presented for Air Canada, Canadian, CN and CP Rail for 1988 to 1993.

CN and CP Rail are considered to be representative of the rail freight industry and are used for comparison with the U.S. rail industry.

Changes in the level of indebtedness since 1988 provide a rough assessment of the impact of the last recession on these capital intensive industries. Planned or recent capital investments for the major carriers and the marine industry in general are noted.

Operating ratios of truckload firms are compared to less-than-truckload firms. A comparison of Canadian and U.S. major carriers is included.

For a large number of Canadian businesses, 1991 and 1992 were very difficult years financially. Overall, in 1992, industrial corporations and financial institutions (excluding investment and holding companies) reached a record low and barely managed to post a net income. Between 1990 and 1992, operating revenues were either increasing at a lower rate than operating expenses or decreasing at a faster pace than operating expenses (Figure 9.1). Consequently, operating ratios, which relate operating expenses to operating revenues, deteriorated significantly. Operating profits were so low that they hardly covered interest expenses. In general, however, the financial position of Canadian businesses improved in 1993, but only to depressed 1991 levels.

Compared to other sectors, the financial performance of the transportation sector was one of the worst. While the overall pattern observed in the transportation sector was similar to that of the economy in general, the deterioration in the sector's financial performance was more pronounced. In 1991 and 1992, operating revenues decreased each year by 4.5 per cent and operating expenses decreased by 2.6 and 2.2 per cent, respectively. Since 1991, net incomes have evolved into losses (Figure 9.2). In 1992, one of the worst years, profit margins and return-on-asset ratios became negative, while operating expenses surpassed operating revenues.

FIGURE 9.1
Changes in Operating Revenues and
Expenses for All Industries
1985 to 1993

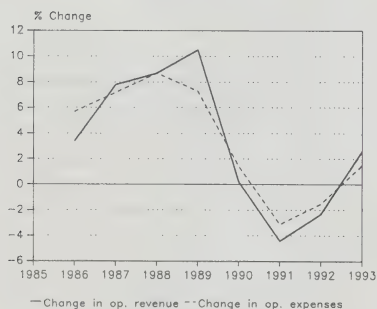


FIGURE 9.2
Net Income Generated
by the Transportation Services Sector

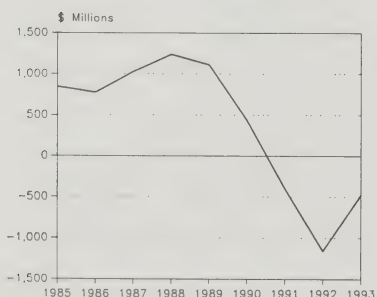


FIGURE 9.3
Operating Ratios of Canadian Air Carriers

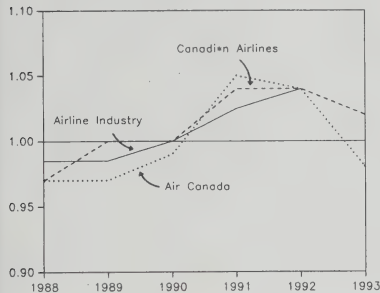
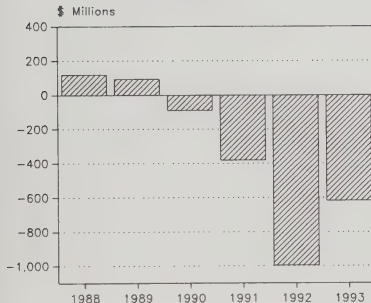


FIGURE 9.4
Canadian Air Carriers
Net Income (Loss)



Air

Canadian airlines, like their counterparts throughout the world, continued to experience a downturn in business. Recessionary trends in Canada and in other industrialized economies, coupled with soft demand, created net losses for Canada's two major carriers. The combined losses of Air Canada and Canadi*n were \$627 million in 1993 (Figures 9.3 and 9.4).

In these less than favourable economic conditions, Canadian carriers introduced measures to help restore their financial situation and ensure survival. Measures introduced in 1993 managed to improve revenues and better control costs.

Air Canada

Air Canada announced a \$326 million net loss for 1993, compared with a net loss of \$454 million in 1992. The carrier also reported an improvement of \$222 million in operating results for 1993, with operating income of \$77 million before staff reduction and retirement costs. In 1992, the airline experienced an operating loss of \$145 million. After provision for staff reduction and retirement costs, Air Canada generated a \$1 million operating income compared with a \$197 million operating loss in 1992. Operating revenues from passenger, cargo and other operations increased by 2.8 per cent to \$3,598 million, compared to \$3,501 million in 1992. Operating expenses were reduced by three per cent, to \$3,521 million, compared to \$3,646 million in 1992. This improvement was achieved by reducing employment levels, getting employees to participate in salary reduction programs and lowering fuel expenses.

TABLE 9.1
Air Canada's Financial Results (\$ millions)

	1988	1989	1990	1991	1992	1993
Operating Revenue	3,404	3,618	3,899	3,485	3,501	3,598
Operating Expense	3,300	3,499	3,849	3,649	3,646	3,521
Operating Income (Loss)	98	103	(11)	(200)	(197)	1
Net Income (Loss)	89	149	(74)	(218)	(454)	(326)

Reflecting Air Canada's financial strategy of maintaining a strong liquidity position, year-end cash and short-term investments were \$845 million, an increase of \$427 million over the 1992 level. Major aspects of Air Canada's 1993 financial strategy were to rebuild its equity account and to raise capital. This was achieved through an equity issue in December, 1993, with net proceeds of \$240 million. The improvement in Air Canada's operating revenues, combined with the decrease in operating expenses, brought the operating ratio for 1993 down to 98 per cent, compared with 104 per cent in 1992. Interest paid by Air Canada

on debt amounts capitalized in 1993 was \$228 million, compared to \$213 million in 1992.

PWA Corporation

PWA Corporation, Canada's parent company, incurred a \$291.8 million loss for 1993, compared with a \$543 million net loss in 1992. Of the \$291.8 million loss, \$112.3 million were one-time expenses reflecting restructuring costs and non-cash foreign exchange losses arising from the translation of foreign denominated debt at current exchange rates. Despite the uncertainty surrounding the carrier, PWA reported an operating revenue increase of \$96.1 million to \$2,973.1 million compared with \$2,877 million in 1992. PWA's operating results improved by \$84 million, with an operating loss of \$64.9 million in 1993, compared to \$108.7 million in 1992. In April, 1993, PWA recommenced payments which had been suspended to most creditors in November, 1992. By July, 1993, well over 70 per cent of PWA's senior creditors had signed a debt-restructuring agreement. The remaining creditors agreed to the debt-for-equity-plan in November, 1993. The creditors' approval of the debt-restructuring plan was conditional upon PWA completing a proposed transaction with AMR, the parent company of American Airlines.

Early in 1993, PWA put in place a \$200-million equity investment plan by its employees, to be achieved through wage reductions between 1993 and 1995. At year-end, employee investment plan contributions had reached \$73 million for 1993. PWA's operating ratio for 1993 was 102 per cent, down two per cent from 1992 at 104 per cent. This slight improvement was due to an increase in operating revenues, but the operating ratio remained above 100 per cent due to an increase in operating expenses.

PWA's net interest expenses for 1993 were \$119 million, compared to \$117 million for 1992 (Table 9.2).

TABLE 9.2
PWA Corporation's Financial Results (\$ millions)

	1988	1989	1990	1991	1992	1993
Operating Revenue	2,284	2,649	2,756	2,872	2,877	2,973
Operating Expense	2,206	2,659	2,757	2,984	2,986	3,038
Operating Income (Loss)	78	(10)	(12)	(112)	(109)	(65)
Net Income (Loss)	30	(56)	(15)	(162)	(543)	(291)

Regional Affiliates

For the first nine months of 1993, regional affiliates of Air Canada and Canadi*n improved their financial performance in a way similar to that reported by their respective parent airlines. Their operating income was up from \$36.7 million in 1992 to \$70 million in 1993. Also during the first nine months, the affiliates' net losses declined from \$13.8 million in 1992 to \$2.8 million in 1993 (Table 9.3).

TABLE 9.3
Financial Results of Air Canada's Connectors¹ and
Canadi*n's Partners² (\$ millions)

	1988	1989	1990	1991	1992 ³	1993 ⁴
Operating Revenue	467.8	639.7	764.6	841.9	700.1	700.2
Operating Expense	429.6	584.2	704.3	793.9	663.4	630.0
Operating Income (Loss)	38.2	55.5	60.3	48.0	36.7	70.2
Net Income (Loss)	2.1	(2.0)	4.2	(30.6)	(13.8)	(2.8)

¹ Includes Air Nova, Air Alliance, Air Ontario, AirBC, and NWT Air.

² Includes Air Atlantic, Inter-Canadien, Canadian Regional West, Canadian Regional East, and Calm Air.

³ Revised figures.

⁴ First nine months only.

Rail

In 1993, the Canadian rail operations of CN North America reported a one per cent decrease in operating revenues, compared to a 20 per cent decrease in operating expenses. The improvement positively affected the operating ratio of the rail company, reducing it from 119 to 96 per cent. In 1992, CN's "general and administration" expenses were charged with \$830 million in non-recurring restructuring expenses. Excluding these charges, the operating expenses show no significant changes.

The U.S. rail operations of CN North America increased their operating revenues by 22.7 per cent, while operating expenses decreased by 10 per cent. As a result, the operating ratio went from 139.5 to 102 per cent.

Excluding non-recurring restructuring charges, CN North America's operating expenses, which combines the results of both Canadian and U.S. operations, fluctuated by less than two percentage points and the operating ratio decreased from 97 to 96 per cent.

CP Rail's 1993 operating revenues increased by six per cent, while its operating expenses decreased by 13.5 per cent. These results translated into an improvement of the operating ratio from 109 last year to 90.5 per

Operating ratios improved in 1993.

cent. In 1992, CP Rail System's "general and administration" expenses were charged with an estimated \$454 million in non-recurring restructuring expenses. Excluding these charges, the operating ratio decreased from 96.5 in 1992 to 92.8 per cent in 1993.

Revenues and Expenses

The Canadian Class I railways' freight revenues per revenue-tonne-kilometre look relatively constant over time when measured in current dollars. In constant dollars, however, they have decreased by 29 per cent between 1986 and 1993. Figure 9.5 shows the freight revenues per revenue-tonne-kilometre in current and constant dollars. Over this period, only once in 1987 in Canada and once in 1988 in the U.S., did the Class I railways' increase in freight revenues exceed the rate of inflation.

Expenses per revenue-tonne-kilometre for Canadian Class I railways have fluctuated between 1986 and 1993. Excluding the restructuring charges in 1991 and 1992, the constant dollar figures show a decrease of 27 per cent in 1993 compared to 1986. Tables 9.4 and 9.5 show financial results for CN and CP Rail.

FIGURE 9.5
Class I Railways Freight Revenues
per Revenue-Tonne-Kilometre

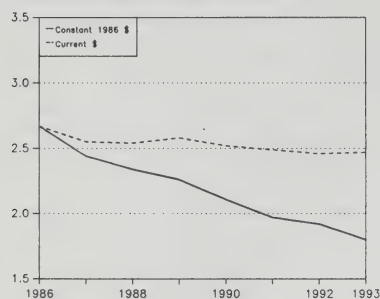


TABLE 9.4
Financial Results for CN (\$ Millions)

	1988	1989	1990	1991	1992	1993
Operating Revenue	3,781	3,515	3,385	3,469	3,440	3,460
Operating Expense	3,297	3,208	3,305	3,291	4,135	3,328
Operating Income	484	307	80	178	(695)	132
Net Income (Loss)	(13)	90	(77)	(34)	(908)	(57)

TABLE 9.5
Financial Results for CP Rail (\$ Millions)

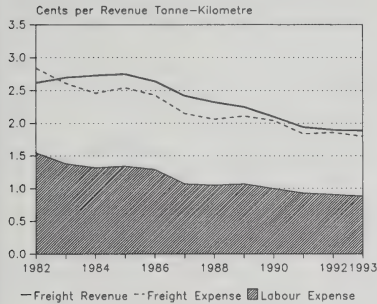
	1988	1989	1990	1991	1992	1993
Operating Revenue	2,717	2,465	2,488	2,549	2,338	2,477
Operating Expense	2,312	2,255	2,212	2,501	2,593	2,242
Operating Income	405	210	276	48	(255)	235
Net Income (Loss)	224	127	164	(7)	(193)	77

Capital Investments

Railways have to invest in infrastructure and equipment.

Rail operations require significant capital investment in infrastructure and equipment. In current dollars, the net property investments on

FIGURE 9.6
Class I Railways
Constant 1986 Dollars



Excludes non-recurring expenses.

FIGURE 9.7
Revenue-Tonne-Kilometre per Employee
Canada and U.S. Class I Railways

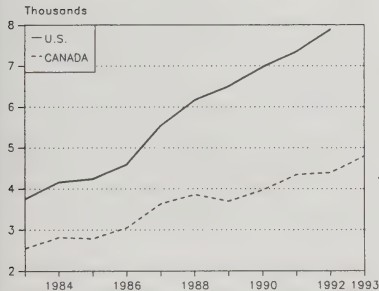
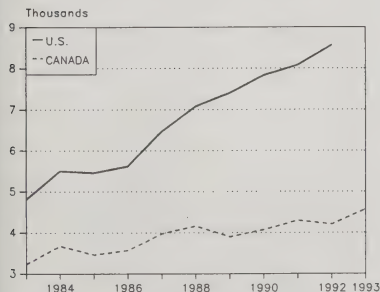


FIGURE 9.8
Revenue-Tonne-Kilometre per Route Kilometre
Canada and U.S. Class I Railways



infrastructure and equipment for CN and CP Rail had increased from \$4.1 billion in 1985 to \$4.7 billion in 1991, before dropping to \$3.8 billion in 1992. Canadian National planned capital expenditures of \$475 million for 1993. This included \$88.5 million for the construction of the St. Clair River Tunnel between Sarnia, Ontario and Port Huron, Michigan (a project estimated at \$190 million) and \$124 million for investment on service reliability (a project worth \$2 billion over five years). CP Rail System's capital spending on equipment and infrastructure totalled \$217.8 million in 1993. Interest expenses on long term debt for these two Class I railways during the period 1985 to 1992, increased from \$263 million to \$349 million. Interest expenses represented 4.2 per cent of operating revenues, in 1985, increasing to 6.1 per cent in 1992.

The U.S. Class I railroads have increased their net property investments from an average of \$3.9 billion in 1985 to \$4.1 billion in 1992. As a percentage of operating revenues, their interest expenses on their long term debt remained relatively constant, decreasing by only 0.1 per cent between 1985 and 1992.

Labour

The railways have been reducing the size of their labour force, yet labour-related expenditures remain a significant element of their cost structure (Figure 9.6). The total number of employees of the two Class I railways in Canada was reduced from 77,960 in 1985 to 48,841 in 1993. In 1993, labour expenses (excluding non-recurring expenses) for CN and CP Rail amounted to \$2.7 billion or 49 per cent of the \$5.5 billion in operating expenses.

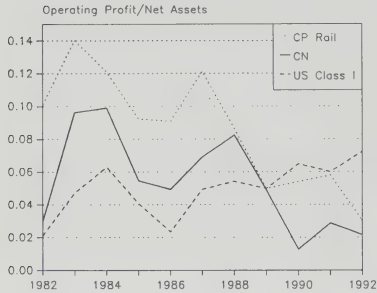
Since 1985, U.S. Class I railroads have managed to reduce the portion of labour costs in their total freight operating expenses. In 1991, this share went as low as 38.5 per cent, but then rose to 42.3 per cent in 1992.

The railways have achieved productivity gains in recent years. Between 1985 and 1993, Canadian Class I carriers have increased their revenue-tonne-kilometre per employee by 45 per cent and their revenue-tonne-kilometre per route kilometre by 21.5 per cent. During that same period, the U.S. Class I carriers managed to increase their revenue-tonne-kilometres per employee by 59 per cent and their revenue-tonne-kilometres per route kilometre by 45 per cent (Figures 9.7 and 9.8). Despite their efforts, Canadian railways have still not been able to outperform their U.S. counterparts.

Indebtedness

The return on assets, which represents the operating profits generated by each dollar invested in the company, has declined since 1987 by 75 per cent for CP Rail and by 69 per cent for CN (Figure 9.9). In 1992, the

FIGURE 9.9
Railway Return on Assets



Excludes non-recurring expenses.

FIGURE 9.10
Operating Ratios of Trucking Firms
Industry versus Major Carriers

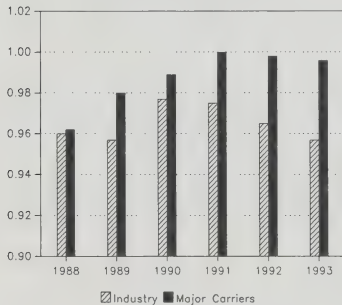
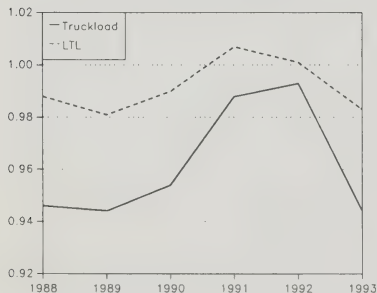


FIGURE 9.11
Trucking Operating Ratios
Truckload versus LTL Operations



return on assets represented less than three per cent for Class I Canadian railways. The Class I U.S. railroads, have been able to increase their return on assets ratio from 4.9 per cent in 1987 to 7.2 per cent in 1992.

Growth in CN's and CP Rail's long term debt has exceeded shareholders' equity since 1990, thus increasing the railways' indebtedness.

Motor Vehicle Carriers

The vast majority of carriers (88 per cent) covered by the Agency's Motor Carrier Interview Program stated that their company's overall financial situation improved or remained stable in 1993. These improvements were reported by carriers, regardless of their operations — truckload (TL) or less-than-truckload services (LTL). This finding is confirmed by Statistics Canada 1993 quarterly survey results, which showed preliminary operating ratio of 95.7 per cent for the trucking industry as a whole (i.e., all carriers). In 1992, the industry's operating ratio was 96.5 per cent (Figure 9.10).

Major carriers' operating ratios at 99.6 per cent in 1993 were an improvement over the 99.8 per cent ratio for 1992. Figure 9.11 shows that both TL and LTL carriers improved their operating ratios in 1993. These carriers almost returned to their respective 1989 levels, a year of sound financial results. Financial analysts see a 95 operating ratio as a sign of a healthy financial situation (for the trucking industry). The truckload carriers had an operating ratio of 94.4 per cent in 1993.

In 1993, as for previous years, operating ratios were more favourable for U.S. major carriers than for Canadian major carriers. On both sides of the border, however, improvements were achieved in 1993. The improvement in operating ratios for Canadian carriers was equal to that achieved by American carriers in 1993 (Figure 9.12).

Despite the improvements noted in 1993, the poor operating results of the previous years have impacted on the financial position of the trucking industry. The ratios of return on assets, return on equity, and interest expenses are equally important in determining the overall financial health of an industry. In the Canadian trucking industry, the trend of these key financial performance indicators in recent years showed signs of a deteriorating situation (Figure 9.13).

FIGURE 9.12
Operating Ratios
Canadian versus U.S. Major Carriers

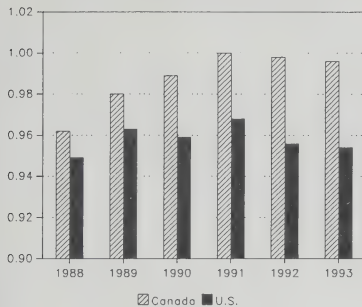


FIGURE 9.13
Financial Ratios
Trucking Industry

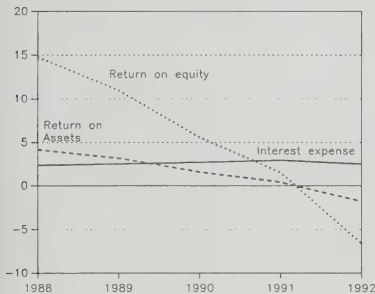


FIGURE 9.14
Employees and Owner-Operators
Expenses in relation to Total Expenses



Financial losses continued in the North Atlantic trade; operators in the Far East trades fared better.

Owner-Operators

Owner-operators are individuals who own a truck tractor (and sometimes a trailer) and who make their service available to trucking firms on a contract basis. Because they are not employees of the trucking firm, owner-operators are continually seeking trucking firms that will provide them with consistent work, better tariffs, and other benefits.

The use of owner-operators within the trucking industry is dictated by numerous factors. Of these, the industry's structure and users' expectations are key. This use of owner-operators adjusts to market conditions and has varied from year to year.

Owner-operator expenses for 1993 accounts for 24 per cent of total carriers' expenses, compared to a 21 per cent share in 1988. Payments for wages and benefits to employees has remained stable at approximately 32 per cent of total expenses between 1988 and 1993. Figure 9.14 shows the share of total expenses for employees and owner-operators.

Marine

International Shipping

Financial information on international shipping activities tends to be available on an industry-wide basis, reflecting the fact that most international shipping companies are privately owned and controlled from jurisdictions which do not require financial disclosure. In view of the extensive integration of shipping operations evident in the myriad of joint operations, slot chartering and facilities-sharing agreements that characterize the industry, aggregate information is not inappropriate for an analysis of financial results for Canada's liner trade activities.

Liner shipping companies operating in the North Atlantic trade lost a reported US\$400 million in 1992, and a further US\$150 million in 1993. Operators in the Far East trades tended to fare better, primarily due to their ability to maintain rates at a higher level.

An indicator of the financial performance and health of this segment of the industry is the number of orders placed for new ships. In 1993, the number of new vessels on order continued to rise, especially for large-scale vessels exceeding 4000-TEU capacity. This trend indicates that financing remained available, with international banks and lending institutions confident in the industry's potential earnings levels.

Despite the overall depressed rate levels of the past five years, no significant bankruptcies were reported in international bulk shipping, but the prospect of new vessels entering the industry at current low levels of

return will continue to create downward pressure on rates, especially in the high volume trades such as coal and iron ore.

Domestic Shipping

Apart from CP Ships/Canada Maritime, other privately-owned Canadian shipping companies do not publish financial information. However, information from the Canadian Shipowners Association (CSA), which represents the largest component of the domestic industry, provides insight into the overall financial performance of this sector.

Overall financial performance of Canada's domestic shipping industry was weak.

In 1988, the overall operating margin for CSA member companies was 0.4 per cent. It fell to a low of minus 3.4 per cent in 1991, recovering slightly in 1992 to 1.2 per cent. This is considerably below the average operating margin for most other Canadian industrial sectors and indicates relatively weak performance. Further evidence of the weak financial state of the industry is found in the decline in working capital (current assets minus current liabilities) among CSA companies. Working capital dropped from \$3 million in 1988 to minus \$137 million in 1992.

The asset base of the Canadian domestic shipping industry has continued to erode during the past decade. In 1983, the Canadian Great Lakes fleet numbered 156 vessels with a combined gross registered tonnage (G.R.T.) of 2.1 million tons. By 1988, this number had fallen to 121 vessels. As of 1993, the fleet stood at 115 vessels totalling 1.8 million tons. The majority of vessels scrapped during this period were bulk carriers used for carrying grain to lower St. Lawrence ports and returning with iron ore for the steel industry. No new vessels have been ordered for the fleet since 1988. As a result, the average age of the fleet has increased to more than 25 years in 1992.

While there have been no major recent bankruptcies, mergers and consolidations have occurred. Only two major operators of straight-deck bulkers servicing the grain trade now exist: Great Lakes Bulk Carriers and Seaway Bulk Carriers. The vessels of these companies still belong to the original five owners. The trades on the Great Lakes/St. Lawrence system continue to be dominated by three companies: Canada Steamship Lines, Upper Lakes Shipping, and Algoma Central. Increasingly, these companies are turning to international markets for expansion opportunities.

The most important factors affecting the current financial situation of Canadian shipping companies are:

1. The decline in their traffic base, primarily in grain shipments and iron ore traffic.
2. Cost pressures, resulting from the increasing age of the fleet, leading to less reliability, more downtime, and increased maintenance costs, as well as increased costs of tolls, dues, pilotage and tugs.

-
3. Increased competition from other trade routes and transport systems.

St. Lawrence Seaway

Revenue from tolls represents the main source of income for the St. Lawrence Seaway Authority. The substantial drop in Seaway traffic, particularly in grain and coal movements, produced disappointing revenues of \$56.2 million, and an \$11 million loss for the 1992-93 season.

COMPETITION

Highlights of 1993

Air

Charter carriers competed year-round in high density domestic markets with scheduled carriers.

Air Canada and Canadi*n pursued strategic alliances with foreign carriers to face global competitive forces.

Rail

Confidential contracts remained the most important tool used by both shippers and railways to maintain their competitiveness in the marketplace.

Six out of every ten shippers reported competition within the rail transportation industry.

Extra-Provincial Trucking

Canadian trucking firms reported an increased presence of U.S. carriers in both the domestic and transborder market and identified cabotage as an issue.

Trucking firms noted increased competitive pressures from railways.

Marine

Overcapacity remained the dominant factor influencing competition for liner and bulk trades in international markets.

Canadian ports faced increasing competition from U.S. ports on both coasts and on the Gulf of Mexico.

Introduction

When one deviates¹ from competition as the deciding factor in the marketplace, regulatory initiatives can take on many forms. Before the adoption of economic regulatory reform legislation in 1987, transportation legislation placed some reliance on competition as a guarantor of good performance. The 1987 legislation changed the mixture of competition and government intervention.

The new regulatory environment created by the *National Transportation Act, 1987 (NTA, 1987)*, the *Motor Vehicle Transport Act, 1987 (MVTA)* and the *Shipping Conferences Exemption Act, 1987 (SCEA)*, emphasizes market forces as much as possible. Good results were expected to come from the interplay of independent firms, under conditions of limited restriction to entry and mostly independent competitive behaviour. Neither a regulatory agency nor any particular carrier assumed explicit overall responsibility for the results regardless of whether price, quality of service or financial results were affected.

The role of government has been limited to preserving the competitive market mechanisms through, for example, the National Transportation Agency's dispute resolution and monitoring functions and the Bureau of Competition's investigative functions, and making sure the mechanisms work as well as possible. In this competitive environment, carriers were given the opportunities to compete and the responsibility to look after their own interests.

To analyze competition, it is essential to identify the sources of competition. In the case of the transportation industry, there is a distinction between domestic and international operations. For domestic transport services, competition can be intermodal, intra-modal¹ or both. Competition can be solely between Canadian carriers or between Canadian and foreign carriers. The latter can occur when cabotage is allowed or when traffic can be effectively and competitively routed through a foreign carrier's system. For international transportation services, Canadian carriers compete with foreign carriers. In some cases, competition occurs between private and state-owned carriers.

Transportation firms have adopted various strategies to face the challenge imposed by the socio-political-economic environment under which they have to conduct their operations. "Integration" has been partly or totally behind some strategies adopted by carriers. Transportation firms have integrated horizontally, geographically, vertically; entered partnership agreements; affiliated with other carriers; consolidated operationally, financially or both; or simply cooperated through a variety of alliances. To fully understand the nature of competition, it is necessary to examine

¹ Intermodal refers to competition among different modes of transportation. Intra-modal refers to competition within one particular mode.

how integration makes for more or less effective competition and how the combination of integration, interfirm collaboration and rivalry determines the best possible performance for both the industry and the users.

The question is not simply one of *how much* competition to allow. Many factors must be considered: how much freedom of entry? how much independence with respect to price? investment? output? service? publicity? financing?... The question of competition is also one of proper *definition* taking into account the particular circumstances of each industry. This question of definition is tied to the prerequisites of effective competition, but effectiveness is not simple to measure, given that market conditions can lead to price and service competition or both.

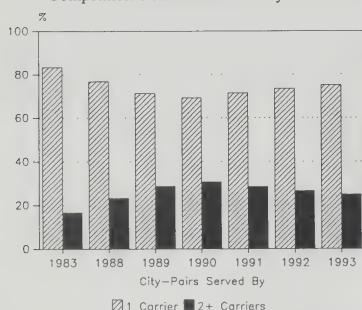
Air

During 1993, many of the competitive forces affecting the Canadian airline industry marketplace resulted from changes that started a decade ago. Prior to May, 1984, when government policy removed the distinction between national, regional and local carriers, the Canadian airline industry operated as a three-tiered system, with government prescribed roles for carriers belonging to each level. Smaller airlines functioned primarily as feeders of passenger and cargo traffic for larger regional and national mainline carriers. They operated under a regulatory framework that governed entry, conditions of carriage and the establishment of air fares. Before the new regulatory developments came into effect in 1984, Air Canada carried well over one-half of all passenger traffic and accounted for almost two-thirds of all passenger revenues. The next largest market shares were held by Canadian Pacific Airlines, with 18 per cent of passenger traffic, and Pacific Western Airlines with 16 per cent.

After 1984, two large carrier families, headed by Air Canada and Canadi*n emerged in Canada's airline industry. A series of acquisitions, mergers, and alliances produced two fully integrated and competitive full-service domestic networks, along with transborder and international operations. "Code-sharing" relationships with smaller regional airlines helped major carriers extend the coverage of their networks throughout Canada. These partnerships allowed regional affiliates to use the same two-letter airline code as the larger airline so that "seamless" connections between flights of different airlines could be achieved.

The development of feeder/connector airline families allowed the two main carriers to extend their market coverage and brand name presence throughout Canada. Consequently, Canadi*n and Air Canada have developed competitive scheduled operations with hubs at Toronto, Montreal, Vancouver, Calgary, Halifax, and Winnipeg in southern Canada and at Yellowknife in the North. Affiliate airlines have re-equipped their fleets with modern turboprop and small jet aircraft, to

FIGURE 10.1
Competition on all Domestic City-Pairs



take over or supplement those routes of the parent airline that are more suited to smaller aircraft. Some regional carriers have also affiliated with a third level of smaller carriers. Consolidation of the industry around two major networks has significantly expanded air services without reducing the level of competition in the marketplace. In fact, more and more communities have been tied into the hub-and-spoke network of both airline families, as illustrated by Figure 10.1.

During 1993, Air Canada continued to promote its vision for a Canadian air transportation industry comprising one international and several domestic carriers. As part of this strategy, Air Canada opposed Canadi*n's proposed alliance with American Airlines on several grounds. According to Air Canada, the consummation of the AMR-PWA deal would destroy Gemini and Air Canada's distribution system; force the export of jobs from Canada to the United States; and reduce Canada's presence in the international airline industry.

Also during 1993, Air Canada made two offers to purchase Canadi*n's international routes from PWA. The intent was to create one strong international airline for Canada, and to preserve PWA as a strong competitor in domestic and transborder scheduled services, as well as international charter markets. The offers were rejected because of the interdependence between domestic and international operations. Traffic fed from Canadian's international services accounted for a reported \$200 million of Canadi*n's domestic service revenues.

In 1993, both the Air Canada and Canadi*n families were present in 40 of the top 42 communities in the air transportation network where 95 per cent of domestic traffic originates or terminates. Each family has dropped a destination since 1991; however, competition is still more widespread than in 1987 when only 35 of the top communities were served by both families.

Competition from other carriers decreased slightly in 1993. Independent airlines were present in 27 of the top 42 markets. This compares with 30 in 1991 and 29 in 1987.

Competition on Scheduled Services

On a 40 city-pair sample, freedom of market entry to new carriers has diluted the capacity shares of previously dominant carriers between 1983 and 1991. In 1983, the dominant carrier's share of seats on direct and same-plane services averaged 76 per cent. In 1991, this share declined to 62 per cent. Although the level of carrier dominance has been stable with the average capacity share remaining at 62 per cent in 1993, air carriers have been losing and gaining positions as the dominant carriers in different markets. (Table 10.1)

In 1983, Air Canada was the dominant carrier on 22 pairs out of 40, PWA on seven and Eastern Provincial Airlines, Nordair Metro,

TABLE 10.1
Dominant Carriers on Selected Domestic Routes

	1983		1991		1993	
	Dominant Carrier	Capacity Share, Per Cent	Dominant Carrier	Capacity Share, Per Cent	Dominant Carrier	Capacity Share, Per Cent
Montreal-Toronto	AC	63	AC	66	AC	69
Toronto-Vancouver	AC	54	CA	66	CA	60
Montreal-Vancouver	AC	52	CA	58	AC	59
Edmonton-Toronto	AC	77	AC	57	AC	59
Halifax-Toronto	AC	71	AC	55	AC	57
Ottawa-Toronto	AC	71	AC	53	AC	64
Calgary-Toronto	AC	60	AC	51	AC	56
Toronto-Winnipeg	AC	62	AC	51	AC	60
Calgary-Vancouver	AC	40	CA	58	CA	61
Edmonton(I)-Vancouver	AC	51	CA	61	CA	52
Halifax-Montreal	AC	71	AC	56	AC	57
Ottawa-Montreal	AC	78	AC	51	AC	56
Thunder Bay-Toronto	AC	51	CA	60	AC	57
Saskatoon-Toronto	AC	100	AC	58	AC	79
Regina-Vancouver	PWA	51	AC	100	AC	95
Montreal-Quebec	QB	61	AC	54	AC	61
St. John's-Toronto	AC	64	CA	52	AC	58
Calgary-Ottawa	AC	78	AC	50	AC	51
Calgary-Edmonton(M)	PWA	92	CA	70	CA	70
Halifax-Ottawa	AC	100	AC	55	AC	53
Ottawa-Winnipeg	AC	89	AC	82	AC	92
Calgary-Winnipeg	AC	57	CA	56	AC	64
Sault Ste. Marie-Toronto	ND	59	CA	56	CA	58
Sudbury-Toronto	AC	100	AC	60	AC	54
Montreal-Val d'Or	AC	71	CA	60	CA	51
Kelowna-Vancouver	PWA	93	CA	52	CA	59
Prince George-Vancouver	CP	58	CA	73	CA	60
Halifax-St. John's	EPA	62	CA	55	AC	53
Charlottetown-Halifax	EPA	100	AC	51	AC	53
Fredericton-Halifax	EPA	100	AC	69	AC	66
Quebec-Saguenay	QB	60	AC	90	AC	100
Sudbury-Thunder Bay	AC	100	NR	57	NR	57
Gander-St. John's	EPA	100	CA	74	AC	52
Kamloops-Kelowna	PWA	100	CMA	100	CMA	100
Edmonton-Yellowknife	PWA	100	CA	61	AC	52
Iqaluit-Montreal	ND	100	CA	91	FA	59
Quebec-Sept-Iles	QB	100	AC	51	AC	53
Cambridge Bay-Yellowknife	NWT	54	AC	44	AC	39
Inuvik-Yellowknife	PWA	100	CA	70	CA	73
Edmonton-Fort McMurray	PWA	100	CA	65	CA	68

Notes: AC-Air Canada (and/or affiliated carrier); CA-Canadi*n Airlines (and/or affiliated carrier); CP-CP Air; PWA-Pacific Western Airlines; EPA-Eastern Provincial Airlines; QB-Quebecair; ND-Nordair Metro; NR-norOntair; CMA-Central Mountain Air; FA-First Air; NWT-Northwest Territorial Airways (NWT Air).

Quebecair and Canadian Pacific Airlines were dominant in the remaining eleven. Between 1983 and 1991 there was consolidation of several regional carriers and CP Air into Canadi*n. In the same period, the two affiliated family networks were formed. By 1991, Air Canada and its connector carriers were dominant in 20 city-pairs while Canadi*n and its family of regional carriers were dominant in 18. The remaining

two were split between the independent operators Central Mountain Air and norOntair.

Since 1991, Air Canada, alone or in combination with one or more of its affiliated regional carriers, has displaced Canadi*n as the dominant airline in seven city-pairs. As a result, Air Canada dominated 27 markets and Canadi*n held on to its dominant position in only 10, Canadi*n also lost one dominant position to First Air.

Since the introduction of the economic regulatory reform legislation in 1988, competitive strategies by Canadian air carriers have changed the way they market their services. New incentives gave passengers and travel agents more reasons for choosing between competing airlines. Selection is no longer limited to a search for the lowest fare or the most convenient flight times. Choices now include: frequent flyer plans, computer reservations systems, travel agency incentives program, and code-sharing among other new marketing practices. The common objective of these techniques is to reinforce passenger loyalty to a particular airline brand name.

About half of regular flyers among respondents to the Agency's surveys of the Canadian Professional Sales Association/Northwest Commercial Travellers Association members were enrolled in two frequent flyer programs. About 59 per cent of the respondents identified these plans as either very or moderately important in their selection of an air carrier. Such survey results suggest the need for airlines to compete continuously for the patronage of the travelling public.

Competitive strategies go well beyond price and frequency. Seat width, comfort, amenities, and priority check-in and luggage retrieval are also part of carriers' strategies. They are used in various ways to differentiate their respective products in market segments, to maintain market share and, ultimately, to achieve appropriate financial results. Service-related competitive strategies are consumer-oriented.

The airlines continue to offer numerous competitive travel options by segment, reacting quickly to changing market conditions by developing service options to capitalize on opportunities as they arise.

Economic regulatory reform of the airline industry in Canada has allowed carriers to establish air fares and conditions of carriage based on market intelligence and conditions. Being market-based, fares have become more complex, with rapid changes to match pricing adjustments and initiatives of competitors. Price responses are continually at play throughout Canada as the two families counter each others' initiatives as well as the offerings coming from independent and charter carriers. Pricing freedom for airlines in Canada has stimulated the development of various new products and fares aimed at segmenting customers according to their relative price sensitivities.

After almost 10 years of regulatory freedom in domestic services, active competition between carriers continues to be observed in all regions of the country.

Competition in Domestic Markets Between Scheduled and Charter Carriers

Although Wardair was merged into Canadi*n in 1989 and despite several charter carrier bankruptcies since 1988 (including Nationair in 1993) the domestic charter sector offers seasonal and in some cases year-round competitive air services on several high density domestic routes. Because of the frequency of these charter programs in markets also served by the Air Canada and Canadi*n families, the distinction between scheduled and charter operations is blurred. In domestic markets, charter carriers offer a wide variety of low fares allowing one-way and flexible arrival and departure points, last minute bookings, plus senior citizen and young adult fares offerings. These fares attract not only the traditional price sensitive leisure passengers, but also the price-sensitive "must-go" travellers.

In 1993, Canada 3000, Royal Air, Air Transat and First Air all operated domestic charters in concert with tour operators. During the third quarter of 1993, the charter carriers operated in 13 of the top 25 city-pairs in Canada as well as in five others. Furthermore, they provided year-round competition to Air Canada's and Canadi*n's scheduled services in several high-density domestic markets (see Box).

High-Density Domestic Markets with Year-Round Service from Scheduled and Charter Carriers

Toronto-Vancouver
Toronto-Calgary
Toronto-Edmonton
Toronto-Winnipeg
Toronto-Halifax
Toronto-St.John's
Ottawa-Calgary
Ottawa-Vancouver
Montreal-Calgary
Montreal-Vancouver

The charter carriers represent an undeniable source of competition in major Canadian air services markets. During the third quarter, they accounted for approximately 11 per cent of the total available scheduled and charter seats in the 18 city-pairs where the charter carriers competed directly with the scheduled carriers. This is an increase from nine per cent on only nine city-pairs served during 1992. In the largest of the domestic charter markets, Toronto - Vancouver, the charter carriers represented 15 per cent of the capacity. Moreover, during the peak summer months, the charter carriers accounted for all the non-stop capacity in the Toronto-Gander and Toronto-Stephenville markets. The number of passengers carried on domestic charter flights for the first nine months of 1993 was 511,308.

Competition from charter programs is also affecting prices for domestic air services. Discounts offered by Air Canada and Canadi*n are larger in markets where the charter carriers are active. On the city-pairs where the charter carriers were active, over 68 per cent of the passengers carried by Air Canada and Canadi*n travelled on some form of discount air fare during the second quarter of 1993. On the top 25 city-pairs where domestic charter flights were not offered, only 59 per cent of the travellers flew on discount fares. Furthermore, fares were discounted an average of 52 per cent on the top 25 routes where charter carriers were competing with scheduled airlines. This compares to an average discount

of 34 per cent for passengers travelling on the other top 25 city-pairs where there is no competition from the charter carriers.

Due to the increasing market and network coverage and the nature of their operations, the role of charter carriers in the domestic marketplace goes beyond the low fare niche. Marketing and pricing tactics employed by the charter carriers is helping determine the level and importance of competition prevailing in the Canadian airline business. In addition to domestic routes, the charter carriers compete with the scheduled carriers on international flights offered by Air Canada, Canadian and other foreign carriers.

Competition - Alternate Sources

Traditionally, the demand for air travel has been determined by many factors, such as the overall level of activity in the economy, the level of air fares, international trade, demographics, disposable income, political stability, vacation habits, and availability and frequency of flights on routes. In recent years, technological innovations such as teleconferencing have offered alternatives to air travel. During the recession, travel in general, including business travel, declined sharply. As part of the ongoing restructuring in several sectors of the Canadian economy, many companies have downsized their management team which in turn also reduced the number of business travellers.

With reduced corporate travel budgets, organizations are turning to other cost-effective services which permit replacement of part of their corporate travel needs. Results of the Agency's survey of Canadian Professional Sales Association members showed that half of the respondents switched from air to other modes for business travel, notably the automobile. On average, survey results indicated an almost even split between plane and car business travel, while personal travel leaned more heavily towards the automobile (over two-thirds).

Technologies such as tele- and video-conferencing are replacing air travel for organizations in both the public and private sectors. According to the Agency's survey of professional salespersons alternative methods of maintaining business contacts are being used. Nearly two-thirds of the respondents reported an increase in telephone and fax activities, as well as courier services. Some respondents indicated they had used tele-conference services, but only a few reported they had used video-conferencing.

In 1993, the tele- and video-conferencing market in North America was estimated to be worth over US\$1 billion and is widely acknowledged as a growing segment of the telecommunications industry. As costs for equipment and transmission facilities decrease, video/tele-conferencing will likely become more widely diffused. As users become more comfortable with the technology, video-conferencing will likely prove to be a viable and effective way to conduct business meetings.

Originally, video-conferencing was nearly always conducted on a point-to-point basis between two sites. Today, video and tele-conference meeting simultaneously link participants either at different sites within the same city or at several different cities. Travel is not necessary. Video-conferencing reduces travel costs (air fares, car rentals, meals, hotel, etc.); reduces the time away from the office, home and family; and increases the number of people who can exchange ideas and information at a meeting.

TABLE 10.2
Air Travel Versus Video-Conferencing Costs

City - Pair	Travel Costs Per Person ¹	Video Conference Costs ²
Toronto-Vancouver	\$2,028 ³	\$1,650
Toronto-Montreal	\$ 646 ⁴	\$ 960
Toronto-New York	\$ 935 ⁵	\$3,000
Montreal-Halifax	\$1,084 ⁶	\$1,080

¹ Travel costs expressed in Canadian dollars and assumes the purchase of a full economy class fare.

² Assumes a three-hour meeting, unlimited number of people attending, video conferencing facilities provided by a public carrier and all applicable connection charges; all charges provided by Stentor.

³ Assumes a two-day trip and one night of hotel accommodations, car rentals, meals, and applicable taxes.

⁴ Assumes same day return, meals, car rental and applicable taxes.

⁵ Assumes two days, one night, meals, accommodations, car rentals and applicable taxes.

⁶ Assumes two days, one night, meals, accommodations, car rental and applicable taxes.

Companies can have either their own in-house video-conferencing facilities or use commercial video-conferencing facilities. A noteworthy advance in this technology is desktop video-conferencing systems based on micro and personal computers.

Video communication systems are currently used by several sectors such as government, education, aerospace, telecommunications, drug/pharmaceutical, energy, health and financial sectors, to name a few.

Although in-person meetings will continue, these new technologies offer organizations a significant opportunity to reduce their travel-related expenditures, increase productivity at the office, and reduce travel-related stress. Clearly, this technological development has the potential to make serious inroads into the demand for air travel.

High-Speed Rail

Studies on the feasibility of building high-speed rail lines were conducted for the busy Quebec City — Windsor corridor during 1993. Future improvements could reduce the time required for rail trips and, in turn, the demand for air services on short to medium distance city-pairs. In 1993, CP Rail and Asea Brown Boveri sponsored a Canadian demonstration of the X 2000 high-speed train along the Windsor, Toronto, Ottawa, Montreal and Quebec City corridors. Moreover, Air Canada and CP Rail also examined high-speed rail developments in the corridor while Bombardier, which has the North American rights to build the French-designed TGV, continued to look at the feasibility of high-speed rail in this corridor. A study into the feasibility of high-speed rail in the Quebec-Windsor corridor, jointly sponsored by Transport Canada, and the governments of Ontario and Quebec, is due for completion in 1994.

Airlines are interested in high-speed rail not only as a potential source of competition, but also as a way of complementing their own service. For example, high-speed rail in the Quebec City-Windsor corridor could permit airlines to concentrate on longer-haul markets by reducing jet and turboprop operations on some short-haul feeder routes.

International Forces and Global Competition

Forces at work internationally are influencing the structure of the international air transport sector and indirectly, the Canadian air transportation industry. Some of the global forces shaping the airline operating environment in the nineties include mergers, acquisitions, cross-shareholding, route sharing, code sharing, computer links, integration of route networks and scheduling, combined maintenance, liberalization, privatization, and increased automation and computer technology.

Both Air Canada and Canadi*n have responded to these global developments with several initiatives related to their respective North American and global strategies. Both carriers have established equity, commercial and marketing links with major foreign carriers. The objective of these alliances is to improve their ability to attract passengers by improving frequency and serving more destinations. A number of the initiatives taken in 1993 are reported in the Structure section.

For example, Air Canada's agreement with Continental offers the potential to exchange traffic at Continental's U.S. hubs served by both carriers thereby improving Air Canada's connection possibilities throughout North America and beyond to and from Central America, Japan, Southeast Asia and Australia. Air Canada's commercial and marketing alliance with United Airlines is another example of an initiative designed to enhance product options and reduce connection

times for passengers utilizing the services of both carriers at their respective gateways in Canada, the United States, Europe, Latin America and in Pacific Rim countries. A marketing and commercial alliance with Air France improves Air Canada's access to traffic between North America and Europe, Africa and the Middle East. Similarly, Air Canada's alliance with Korean Air extends its network across the Pacific to Seoul, Korea.

Canada has also pursued broad-based investment and strategic alliances to gain a better position in the world air transport market. An alliance with American Airlines allows for a large number of connection possibilities to the U.S. market out of Toronto. Commercial alliances in South America were gained through a code-share and joint flights relationship with Varig of Brazil; in Europe, with Lufthansa; strategic alliances with the flag carriers of Australia (Qantas) and New Zealand (Air New Zealand) for joint services between Canada and the South Pacific; and a strategic alliance with Mandarin Airlines of Taiwan in the Orient.

Since competition in domestic markets cannot be assessed in isolation from global developments, airlines consider both domestic and international factors when preparing long-term strategic plans.

Rail

Competition in the Canadian rail transport industry should be looked at by clearly distinguishing among three different markets: east of the province of Manitoba (East) where many of the commodities moved by rail are of high value and transported in low volumes; west of Ontario (West) where rail commodity traffic is of low value but moved in high volumes; and the transborder market, increasingly important because of the North American Free Trade Agreement (NAFTA) and the Canada-U.S. Free Trade Agreement (FTA). In 1993, the split between the three markets of Canadian Class I railways' originating traffic was as follows: 56 per cent in the West, 36 per cent in the East and eight per cent was transborder traffic.

In the East, there is a mature and well developed road network with an industrialized corridor from Québec City to Windsor. Transportation needs are characterized by relatively short average haul and just-in-time delivery requirements. In this market environment, the rail industry has to compete head-to-head with the trucking industry.

Just over 45 per cent of the Eastern shippers who responded to the 1993 Agency's Shippers Survey said that they use rail. On average, they moved less than 30 per cent of their traffic by rail. Half of the shippers also used intermodal services for approximately 17 per cent of their traffic.

Conditions in the West, are different with longer average hauls and a less densely-developed road system through the mountains. Trucking is less threatening, especially for the bulk commodity traffic, and competition has to come from other railways. In this region, Class I railways moved primarily grain, coal, sulphur and potash.

Over 75 per cent of the Western shippers who responded to the Agency's survey stated that they use rail services. On average, they moved less than 40 per cent of their traffic by rail. Sixty per cent of the shippers from the West also said they used intermodal services for 12 per cent of their traffic.

Canadian railways compete with U.S. railroads for transborder traffic. For these moves, competition is defined and delimited by access to customers, type of services offered and operating costs. Traffic received by Canadian Class I railways from their connections with U.S. railroads represented approximately eight per cent of their traffic. In 1993, the volume of rail transborder traffic in the East was twice as important as that in the West.

In response to the Agency's survey, six out of ten shippers said Canadian rail carriers are either interested or very interested to compete for their domestic traffic. That percentage rises to 69 per cent for U.S. transborder traffic, but drops slightly to 58 per cent for traffic to Mexico. More than 71 per cent of the shippers said that railways were just as interested to compete for their traffic in 1993 as in 1992. Sixteen per cent of shippers using rail services who responded to the Agency's Shippers Survey said the railways are becoming more willing to compete for their domestic traffic. As for foreign rail carriers competing for Canadian traffic to the U.S., 74 per cent of shippers felt they are just as interested in 1993 as they were in 1992. Seventeen per cent thought that they were more interested. When these figures are combined, they reveal that 91 per cent of shippers feel that the U.S. carriers retain a strong interest in serving the Canadian market and in competing for Canada's rail transborder traffic.

The majority of rail shippers said that railways were either interested or very interested to compete with other modes of transportation for their domestic traffic. For transborder and Mexican traffic, 76 per cent and 71 per cent respectively, reported high interest by the railways to compete with other modes.

Approximately 14 per cent of shippers noted that railways were more interested to compete for their traffic in 1993 than 1992, and 18 per cent of the shippers reported that the railways were less interested in competing with other modes in 1993 than in 1992. A large majority (68 per cent) of shippers indicated no change in the willingness of railways to compete for their business.

Both rail and truck are competing directly with each other for some traffic. Based on the Shippers Survey results, 25 per cent of the shippers who shifted traffic from truck to rail reported a deterioration in trucking services, while nearly half of those who shifted traffic from rail to truck reported an improvement in truck service from the previous year. Survey results show that modal shifts are due not only to service quality, but also to changes in market conditions and relative prices of different transportation services.

According to survey results, "service reliability" has replaced lower prices as the single most important factor for rail shippers to maintain their competitive position. In order to negotiate competitive terms and conditions for rail services, shippers identified access to other modes of transportation as the second most important factor after confidential contracts.

Confidential Contracts

Since their introduction in 1988, rail confidential contracts have been used to enhance the competitive position of railways. Confidential contracts remain a very popular tool in railways' marketing strategies. There were 6,183 confidential contracts filed with the Agency in 1993. Of these, 4,950, or 80 per cent, were filed by CP Rail. CN filed 16 per cent and less than one per cent were filed by other Canadian railways. U.S. railroads had fewer than four per cent of the contracts filed in 1993, with Burlington Northern filing the largest number, at 112 contracts. CP Rail's disproportionately high share of confidential contracts reflects a marketing approach customized to the individual shipper. The six commodities that were most often mentioned in confidential contracts are: "pulp, paper, and allied products"; "chemicals and allied products"; "lumber and wood"; "hazardous materials"; "food and kindred products", and "petroleum, coal" (Figure 10.2).

FIGURE 10.2

Top Six Commodities Listed in Confidential Contracts Summaries

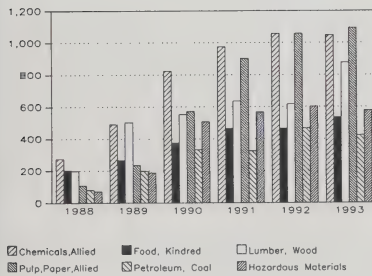
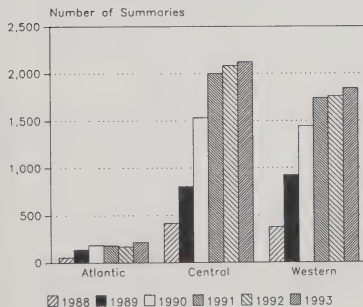


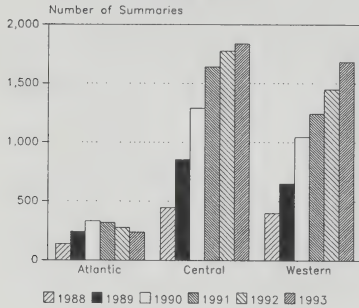
FIGURE 10.3

Origins in CN and CP Rail Confidential Contracts Summaries by Canadian Regions



Since 1990, the number of confidential contracts for traffic originating in the U.S. has been increasing at a faster pace than contracts for traffic with Canadian origins. Similarly, the number of confidential contracts with U.S. destinations also increased in recent years. Ontario was named the most frequently as the province of origin in CN and CP Rail's 1993 contracts. Ontario represented 25 per cent of the origins, followed by British Columbia and Quebec with 15 per cent each. Ontario was also the leading destination province with a frequency of 20 per cent. Quebec, Alberta and British Columbia registered 15, 14 and 12 per cent, respectively. Many of the confidential contracts are with two or more participating railroads, including U.S. carriers. This reflects the growing importance of transborder freight movements to the Canadian economy. CSX and Conrail are involved in 600 and 500 contracts, respectively. Cooperation between carriers, as reflected in these contractual arrangements, is just as important as competition in providing service to shippers.

FIGURE 10.4
Destinations in CN and CP Rail
Confidential Contracts Summaries
by Canadian Regions



In 1993, 42 per cent of shippers had confidential contracts with the railways for domestic traffic, 34 per cent for traffic to and from the U.S. and 14 per cent for traffic to Mexico. Shippers with confidential contracts also moved the majority of their rail traffic under contract. Survey results showed, on average, that 79 per cent of their domestic traffic, 77 per cent of transborder traffic to/from U.S. and 72 per cent of traffic to/from Mexico moved under contract. Shippers affirmed that rate concessions remained the most important factor in negotiating contracts with the railways.

TABLE 10.3
Factors of Importance to Shippers in Confidential Contracts

Factor	Rank					
	1988	1989	1990	1991	1992	1993
Rate Concessions	1	1	1	1	1	1
Service Guarantees	3	3	2	2	2	3
Rate Escalation Guarantees	2	2	3	2	3	2
Equipment Guarantees	4	4	4	4	4	4

Interswitching

Interswitching provisions are part of the rail competitive access provisions introduced in this legislation in the *NTA, 1987*.

Under the interswitching provisions in the legislation, a shipper located on one railway is permitted to have its traffic interchanged to another railway for the line-haul. This condition applies when the point of origin of a movement of traffic is within a radius of 30 kilometres of an interchange. The Agency has the responsibility to determine maximum rates charged for an interswitching move. Similar provisions apply to terminating traffic.

Shippers reported that they used interswitching to obtain a better routing for their traffic, or to gain more competitive terms and conditions. These two reasons were cited by 86 per cent of responding shippers. Over 60 per cent of the shippers who interswitched cars in 1993, reported spending \$10 million or more for transportation during the year. Sixty per cent of shippers who reported facilities with access to rail, had access to only one railway. Close to 70 per cent of these shippers' facilities are within the 30 km radius (stipulated in the legislation) of an interchange with another railway.

CN and CP Rail interswitched 222,586 cars in Canada in 1993. This figure represents a decrease of seven per cent from the 238,109 cars that

were interswitched in 1992. Over 90 per cent of the cars were interswitched between these two railways. In 1993, most of the cars interswitched were interswitched either in British Columbia (35 per cent) or Ontario (33 per cent). The significant number of grain cars that were interswitched at Thunder Bay and Vancouver, under special agreements between CN and CP Rail, account for these figures.

Interswitching was considered by shippers as the third most important factor in achieving competitive terms and conditions for rail services.

Competitive Line Rates

A shipper located on one rail line and beyond interswitching limits (30km) can ask its local railway to establish a Competitive Line Rate (CLR) for moving goods to a competing railway line. To use this option, the shipper must have already reached an agreement with the competing railway before requesting a CLR from the local railway. The CLR applies from the point of origin or destination to the nearest interchange with the competing railway. If parties cannot agree, the shipper can ask the Agency to set a CLR according to legislated guidelines.

According to the Agency's 1993 Shippers Survey results, the vast majority of shippers reported that they did not undertake negotiations with connecting railways for a CLR. For those who negotiate, the connecting carrier was Canadian as often as American. No applications were made to the Agency for a CLR in 1993.

Competitive line rates were considered by shippers as the fourth most important factor in achieving competitive terms and conditions for rail services.

Trucking

The level and degree of competition prevailing in the trucking industry is derived from the Agency's Shippers Survey and the Motor Carrier Interview Program.

Carriers' Perspective

The Agency's 1993 Motor Carrier Interview Program gave carriers the opportunity to express their views on the question of competition, particularly its impact on their business. Carrier officials identified their main competitors to be railways, other trucking firms based either in the same province or in other provinces or in the United States plus private carriers who operate for-hire services. It was clear from the interviews that the level of competition varies from market to market and is not uniform across all Canadian provinces.

Competition in Domestic Trucking Services

The Agency's Motor Carrier Interview Program revealed that, in general, competition was still very intense in 1993. Very few carriers (fewer than 10 per cent of those interviewed) indicated that they faced less competition than in 1992. A significantly high proportion of carriers also indicated a higher level of competition in 1993. The majority of carriers indicated that the competition level in 1993 was comparable to 1992, a year characterized by intense competition.

Truckload Intra-Provincial Services

Of the sample trucking firms interviewed, 51 one per cent indicated that the level of competition in the truckload (TL) intra-provincial market in 1993 was comparable to the level observed in 1992. However a significant proportion of carriers (45 per cent) reported more competition. The increase was identified as coming mainly from carriers based in the same province (particularly in Eastern Canada: Maritimes, Quebec and Ontario) and, to a lesser degree, from carriers based in another province. Carriers operating in the Maritimes and in British Columbia also stated that private carriers were present more in their market. Carriers from the Maritimes, British Columbia and Quebec did not note an increase in competition from the railways. Carriers operating from Quebec, British Columbia and Alberta have noticed a significant presence of American carriers in their market, again which raises the issue of cabotage. Carriers from Manitoba and Saskatchewan reported about the same level of competition in their truckload domestic operations.

Truckload Extra-Provincial Services

In truckload extra-provincial operations, a significant proportion of carriers included in the Agency's sample of motor carrier firms indicated a higher degree of competition coming from various sources. Private carriers were identified by 38 per cent of the carriers as a significant source of competition. Carriers based in the Maritimes offering extra-provincial services, unanimously reported a higher level of activity from private carriers.

The carriers also noted intense competition from American carriers, with 61 per cent of sampled carriers reporting an increase in competition from U.S.-based carriers in 1993. More increase competition from American carriers was also observed by carriers based in the Maritimes, Quebec, Manitoba and British Columbia. In other provinces, the presence of American carriers was noted to a lesser degree. Competition from carriers based in other provinces was increasing according to 57 per cent of carriers, mostly in Ontario, Manitoba and Alberta. Almost all Alberta-based carriers interviewed were affected by a growth of competition from non-Alberta-based carriers. Maritimes, Ontario and Manitoba carriers reported more competition from railways in 1993 than

in previous years. Finally, a significant proportion of respondents (47 per cent) reported a higher level of competition from other extra-provincial carriers based in their province. The increase in this type of competition was most prevalent in Ontario.

Less-Than-Truckload Intra-Provincial Services

In the less-than-truckload (LTL) intra-provincial operations, a majority of the surveyed carriers (59 per cent) declared that the level of competition in 1993 was comparable to 1992. The increase came mostly from other Canadian competitors based either in the same province or in another province. In the Maritimes, 85 per cent of the carriers in that segment of the industry indicated that competition from carriers based in their province had increased.

Less-Than-Truckload Extra-Provincial Services

Although a majority of respondents in the LTL extra-provincial segment said they had experienced a higher level of competition from most groups (except from private carriers), the differences between carriers indicating a higher or the same level were not significant. This uniformity is seen in every province.

Competition in Transborder Trucking Operations

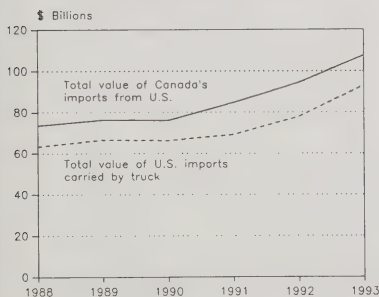
Almost all carriers surveyed flagged the high level of competition prevailing in both TL and LTL transborder activities.

Truckload Transborder Services

This segment of the trucking industry was considered by carriers as being highly competitive. The survey of Canadian carriers identified more competition from several sources including American carriers (71 per cent), carriers based in other provinces (56 per cent), railways (54 per cent), Canadian carriers based in the same province (52 per cent) and private carriers (48 per cent). Carriers from all provinces felt more competitive pressure from American carriers. In the Agency's sample, 90 per cent of Maritimes-based and Manitoba-based carriers and all Alberta-based carriers reported more competition from U.S. carriers.

FIGURE 10.5

Value of Canada's Imports from the U.S.



During interviews, officials of trucking firms reported U.S. carriers were operating not only in transborder markets but also in domestic markets. The growing presence of U.S. carriers in these markets can be explained partly by the evolution of the Canada-U.S. trade relationship in recent years. Statistics Canada trade data shows that imports from the United States have been increasing in value since 1988 (from \$ 73.6 billion in 1988 to \$ 107.7 billion in 1993). Some commodities imported from the United States, particularly manufactured products, (moved mainly by truck) account for this increase since 1988 (Figure 10.5).

Because of the importance of backhaul loads in a competitive marketplace, American carriers have aggressively pursued backhaul traffic, (Canada export traffic to the U.S.) for their return trip, traffic traditionally carried by Canadian-based carriers.

In truckload transborder operations, Manitoba-based carriers claimed increased competition from other Canadian-based carriers (100 per cent), from U.S. carriers (90 per cent), railway companies (62 per cent) and private carriers (88 per cent).

Less-Than-Truckload Transborder Services

In the less-than-truckload operations between Canada and the U.S., more carriers reported no change than change in the level of competition. Carriers indicating a higher level of competition in 1993 identified the primary sources as first, American-based carriers, and second, Canadian carriers (47 per cent). Again, Manitoba-based carriers noted more competition from private carriers.

Shippers' Perspective

Competition in trucking services was one of the subjects covered in the Agency's Shippers Survey. Shippers were asked if they noticed a change in the number of for-hire trucking firms competing for their traffic.

TABLE 10.4

Shippers Reporting An Increase In Carriers Competing for their Traffic by Market Segment 1989 - 1993

	1989	1990	1991	1992	1993
	<i>% of responses</i>				
Truckload					
Extra-Provincial	38	42	32	27	25
Transborder	33	46	44	36	29
LTL					
Extra-Provincial	31	35	27	22	18
Transborder	31	35	31	31	26

As shown in Table 10.4, a lower percentage of shippers reported an increase in carriers competing for their traffic in all segments of the industry in 1993. One noteworthy finding is that a high proportion of shippers from all segments of the industry experienced the same intensity of competition as in 1992 (from 60 to 66 per cent). Finally, the proportion of shippers indicating an increase was generally more than twice as high as those indicating a decrease, except for the LTL transborder segment of the market. Shippers' views correspond to the

decreased number of applications reported in the Industry Structure section.

Truckload Services

With respect to intra-provincial truckload services, the response of some shippers from all provinces except Manitoba and Saskatchewan indicated an increase in the number of trucking firms competing for their traffic. In Manitoba and Saskatchewan, shippers reported the same number of trucking firms competing for their business in 1993 as in 1992. The proportion of shippers reporting a higher level of competition was 28 per cent in Quebec, 29 per cent in Ontario and 26 per cent in Alberta.

In extra-provincial services, some shippers from all provinces, without exception, stated that more trucking firms chasing their traffic in 1993. The highest proportion of shippers reporting an increased level of competition were in Quebec (31 per cent), Ontario (33 per cent) and Alberta (29 per cent). As for extra-provincial services, in the transborder market some shippers across the country found that more trucking firms soliciting their traffic in 1993 than in 1992. Increased competition was reported by the highest proportion of shippers in Ontario (43 per cent), Quebec (33 per cent) and British Columbia (29 per cent). Carriers also reported higher level of competition in both the extra-provincial and transborder markets.

Less-Than-Truckload Services

In LTL services, a smaller proportion of shippers reported an increase in the level of competition in 1993. In Manitoba and British Columbia, shippers did not see any change in the level of competition in the intra-provincial market. In all other provinces, some shippers benefited from increased competition. For instance, in Quebec (26 per cent) and Ontario (33 per cent), a healthy proportion had more carriers seeking their traffic than in 1992. In the extra-provincial market, increased competition was reported by some shippers in all provinces except Prince Edward Island, Manitoba and Saskatchewan. In the transborder market, some shippers in all provinces reported the benefits of increased competition.

Willingness of Carriers to Compete for Traffic

Tables 10.5 and 10.6 summarize shippers' perception of truckers willingness to compete for their traffic. The results are based on the Agency's 1993 Shippers Survey. The tables address how willing carriers are to compete not only with other trucking firms but also with carriers of other modes of transportation. The tables differentiate Canadian and U.S. carriers, TL and LTL operations, and domestic and transborder markets.

TABLE 10.5

**Willingness of Carriers to Compete for Traffic in 1993
as Reported by Shippers - TL Transborder Market**

	Competition Within Mode		Competition With Other Modes	
	Canadian Carrier	American Carrier	Canadian Carrier	American Carrier
<i>% of shippers responding</i>				
Very interested	45	43	20	22
Interested	46	45	49	41
Indifferent	6	11	11	14
Not Interested	3	1	4	5
Not Applicable	-	-	16	18
COMPARED TO 1992				
More Interested	25	26	18	16
Just as Interested	71	70	60	58
Less Interested	4	4	7	8
Not Applicable	-	-	15	18

TABLE 10.6

**Willingness of Carriers to Compete for Traffic in 1993
as Reported by Shippers - LTL Transborder Market**

	Competition Within Mode		Competition With Other Modes	
	Canadian Carrier	American Carrier	Canadian Carrier	American Carrier
<i>% of shippers responding</i>				
Very interested	44	38	18	20
Interested	40	38	33	27
Indifferent	14	18	20	27
Not Interested	2	6	6	7
Not Applicable	-	-	23	19
COMPARED TO 1992				
More Interested	29	33	20	18
Just as Interested	64	57	48	46
Less Interested	7	10	13	17
Not Applicable	-	-	19	19

As seen in the tables, shippers perceived a higher degree of intra-modal competition (as opposed to intermodal competition) in the trucking industry. In other words, trucking firms prefer to try to attract business given by shippers to another trucking firm than compete for traffic given to other modes of transportation. This finding was observed in both TL and LTL services from both Canadian and U.S. carriers. The survey results show the willingness to compete of Canadian and U.S. carriers to be comparable. Finally the survey found a higher degree of competition in the TL segment of the industry than in LTL services.

Because trucking firms are willing and able to compete with other carriers and, to a lesser degree, with other modes, shippers have been able, to some extent, to benefit from this competitive marketplace.

Competition and Rates

The survey findings on shippers' reactions to a proposed price increase are summarized in Table 10.7. Responses are differentiated by size of annual freight bill.

TABLE 10.7
Shippers' Reactions to a Proposed Increase in Trucking Rates by Size of Shipper Freight Bill -1993

Type of Trucking Service	Truckload			LTL		
	Under \$1M	\$1-\$10M	Over \$10M	Under \$1M	\$1-\$10M	Over \$10M
Annual Freight Bill						
	<i>% of responding shippers¹</i>					
Successfully negotiated a reduction in the increase	38	67	66	45	65	69
Adjusted the price of goods accordingly	15	6	13	15	7	4
Absorbed the increase	18	21	21	26	25	24
Switched to other trucking firm	45	27	27	45	25	22
Switched to other mode of transport	6	7	11	5	4	2

¹Shippers could give more than one response to the question.

Results of the survey clearly showed that when confronted with a price increase, the preferred choice of shippers was to negotiate with the carrier for a reduction of the proposed increase in both the TL and LTL services. More than 65 per cent of shippers with an annual freight bill of \$1 million or more successfully negotiated a reduced price increase with the carriers in both TL and LTL services. Smaller shippers with annual freight bill of less than \$1 million were not as successful. Only 38 per cent of the TL shippers and 45 per cent of the LTL shippers reported having successfully negotiated a reduction in the proposed

increase. Nevertheless, the ability of shippers to prevent carriers from increasing their rates indicates the high degree of competition in the marketplace. Competition is thriving largely because shippers could turn to their second preferred strategy and change trucking firms when they were unable to negotiate lower rate increases. This option was widely used by smaller shippers to obtain better rate conditions. Forty-five per cent of shippers adopted this approach in both TL and LTL services, making this the preferred strategy of small shippers. This option was chosen by 27 per cent of larger shippers in the TL segment. In the LTL segment, the same proportion of large shippers opted to either change trucking firms or absorb the price increase of their existing carrier.

A significant number of shippers preferred to absorb the price increase but to negotiate improved service conditions. To them, service quality was equally important as cost to remain competitive.

Some shippers had no choice but to accept rate increases as they were unable to negotiate lower rates. The survey results indicate that 15 per cent of smaller shippers (less than \$1 million) in both the TL and LTL segment of the industry, and 13 per cent of large shippers (more than \$10 million) in the TL segment ended up incorporating trucking rate increases into their own prices.

TABLE 10.8
Shippers' Reactions to a Proposed Increase in Trucking Rates-1990-1993

	Truckload				LTL			
	1990	1991	1992	1993	1990	1991	1992	1993
	<i>% of shippers responding¹</i>							
Successfully negotiated a reduction in the increase	50	56	60	55	45	51	55	55
Adjusted the price of goods accordingly	17	13	12	12	17	15	10	11
Absorbed the increase	33	24	22	20	39	34	28	26
Switched to other trucking firm	31	33	34	34	25	30	31	36
Switched to other mode of transport	5	4	3	8	3	2	2	4

¹Shippers could give more than one response to the question.

Shippers do not shift easily to other modes of transportation when confronted by a proposed truck rate increase. The 1993 survey results showed that only between two and seven per cent of TL and LTL shippers did so. The results also showed that the ability to pass on a truck rate increase seems to increase with the size of the shipper as 13

per cent of large TL shippers indicated their prices increased as a result of increased trucking costs.

Survey results show that the proportion of shippers able to negotiate their way out of a proposed rate increase has been steadily high since 1990 in both TL and LTL services. In recent years, LTL shippers have avoided reflecting rate increases in the price of their products because their own competitive environment forces them to aggressively pursue other ways to meet increased trucking costs. A growing number are switching to a different carrier with better rate conditions. The results clearly show that intense competition is a business reality faced by trucking firms, but also by shippers as fewer and fewer are able to pass on the cost increase through a price increase on their products.

While Canadian trucking firms are willing and able to compete in the markets they serve, they are no longer willing to do so at any cost. Most of the carriers interviewed declared having developed better costing systems which allow them to tailor their prices more closely to costs.

Barriers to an Open Competitive Environment in Trucking

Deregulation and the recession have stimulated, firms within the trucking industry to restructure their operations. Those who have shown signs of success in their restructuring appear to be better equipped to face the upcoming challenges. Carriers hold the opinion that a number of issues must be addressed before a fair and open competitive environment can be achieved.

Although members of the industry recognize that market entry is an open process across the country, some carriers claim that there are still some provinces where entry should be easier. For carriers who meet the necessary qualifications, a licence should be easy to obtain across Canada and in the United States. According to carriers, ease of entry is essential for a healthy competitive environment. Carriers also want the rules and regulations that govern the trucking industry to be harmonized across jurisdictions. Carriers view the differences across jurisdictions as artificial barriers to competition. Carriers also feel that existing rules and regulations should be applied uniformly to all carriers, regardless of their size or their base of operations. Large carriers believe law enforcement agencies have shown a tendency to target their operations, indirectly creating unfair advantage for smaller operators who are not paying the same cost of compliance. This comment by large carriers was directed toward safety regulation enforcement activities. Canadian carriers also felt that Customs and Immigration law enforcement in Canada was much more liberal than in the U.S. Consequently the cabotage issue has resurfaced and is now considered by Canadian trucking firms to be a serious matter that needs corrective action. Carriers would like to hold an open and fair discussion with the American authorities with the objective of liberalizing the U.S. legislation and regulations to achieve a more evenly balanced competitive

environment. Some carriers also believed that any form of subsidy distorts the competitive environment.

Marine

International Liner Trade

International marine traffic generally represents only one segment of a movement of goods by several transportation modes. The scope of competition extends beyond the waterborne portion, and includes port services and inland transportation at both ends of the movement. Competition exists among routing options, and within each component of any routing.

Despite industry efforts to manage competition, market forces play a prominent role in the international liner trade.

Competition for international waterborne liner traffic pits shipping conferences against independent lines, and to a lesser extent, conference members against each other. However, the conference system has moderated competition through the use of collective rate-making and standardized conditions of service. Current agreements such as the TransPacific Stabilization Agreement and the Trans Atlantic Agreement attempt to control competition even further, incorporating both conference and non-conference carriers in cooperative arrangements. Vessel capacity deployed as well as the tariffs to be charged are managed through these arrangements. In 1993, new self-policing arrangements were announced by carrier groups in both transatlantic and transpacific trades to ensure compliance with the terms of rate and capacity agreements on file. Together with the extensive integration of carrier operations through joint services, vessel-sharing, container slot-chartering and common terminal facilities, these developments tend to limit competition in the liner trade.

On the other hand, market forces have effectively promoted intense competition, especially in the transatlantic trades, where continuing overcapacity remains the dominant factor. Evidence of such competition is found in the downward trend in tariffs on the U.K./Continental Europe to Canada route (see Transportation Prices). Efforts to rationalize the number of vessels in service have been frustrated by the expansion of the world fleet with the introduction of a new generation of large-scale ships. Overcapacity is a less important factor in the Pacific, but competition is evident in the high rate of new investment in vessels and equipment, and in the rapid response by carriers to match each other's initiatives to improve service frequencies, routings and transit times (see Transportation Services).

Carriers and other transportation service operators have adopted various competitive strategies such as:

- alliances with other competitors to offer larger-scale, standardized services and expand scope of operations;
- joint services and shared equipment to reduce costs and rationalize overcapacity;
- investment in equipment/technology to obtain higher operating performance and lower unit costs;
- establishment of niches by differentiating services from competitors' and capitalizing on unique strengths; and
- adoption of dynamic pricing and yield management techniques.

Independent Action (IA)

Although the impact of the Shipping Conferences Exemption Act (SCEA) is generally downplayed, the legislation contained provisions that were designed specifically to promote competition in the liner trade.

Independent Action

The action by a conference member line of setting a rate or service item different from the conference's existing tariff provisions. SCEA allows any member line to take I/A subject to providing 15 days notice to the conference.

Since 1991, the use of IA has declined among conferences serving Canada, in concert with the general decline in conference membership. The number of conferences using IA has dropped from 13 to seven, with the most extensive use by the Asia North America Rate Agreement (ANERA), Canada Westbound Rate Agreement (CWRA), and West Coast-Middle East Canada Rate Agreement (WAME). In ANERA and CWRA, there is a tendency to incorporate IA rates into conference tariffs. As a result, IA rates are subject to general rate increases with all other listings in the tariffs.

The fact that an IA rate was filed does not necessarily mean that any cargo was actually carried at that rate. Also, other types of rates, such as open rates, special rates, emergency rates, and minimum rates can mimic IA under some conditions of use. For this reason, the impact of IA on the level of competition in the liner trades is less evident in conference tariff filings than in direct feedback from shippers freight forwarders and shipping conferences.

In their response to an Agency survey, most shipping conferences indicated that Independent Action activity remained the same in 1993, although more than one quarter reported it decreasing. Half the conferences reporting IAs stated that IA rates were six to ten per cent lower on average than their standard conference tariff, and even lower in some other cases. Shipping conferences considered IA to enhance their ability to compete with independents and to retain customers, but also to decrease conference rates and revenue bases.

In the Shippers' Survey, some 70 companies, representing over 30 per cent of respondents, reported shipping substantial liner traffic under Independent Action agreements with conference member lines. More agreements were for outbound than for inbound traffic. While the large majority of shippers reported that SCEA had no known effect in enhancing their companies' ability to compete internationally in 1993, they identified Independent Action as the most significant item with any beneficial effects.

In the Agency's survey of Freight Forwarders, the proportion of forwarders not moving cargo on Independent Action rates increased in

1993, indicating an overall decline in their use of IA from the previous year.

Use of IA rates as reported by 17 per cent of freight forwarders. This group appears more successful in negotiating IA rates for export trade since 11 per cent of the respondents reported moving over half of their outbound shipments on these rates compared to only seven per cent on the inbound side. About a quarter of the responding forwarders, in both inbound and outbound trade, reported moving up to 10 per cent of their shipments under IA rates.

Service Contracts

Service Contract

A confidential agreement filed with the Agency by which a shipper commits a minimum volume of cargo, over a fixed time period, to conference member line(s) in exchange for a rate different than the standard conference rate and/or a defined service level.

Shipping conferences serving Canada filed 52 service contracts with the Agency in 1993. This figure represents almost a threefold increase over the previous year's filings. The number of conferences involved increased from four to eleven. Virtually all of the new contracts were due to expire in 1993 or 1994, since the average duration was about 10 months. Also, 14 earlier contracts which were carried over from the previous year expired in 1993. A new form of service contract appeared with the filing of eight "joint" service contracts, each involving a single shipper and more than one conference.

Of all the service contracts filed, 32 dealt with imports of varied finished products, another six covered both inbound and outbound movements of semi-finished and finished goods, and 14 were for the export of primary to finished products. All of the joint service contracts related to the movement of finished products, mostly inbound. The filing of "joint" service contracts conforms with the industry-wide trend toward cooperative agreements and integrated services.

According to the Agency's survey of Shipping Conferences, the proportion of a conference's total cargo moved under service contracts in 1993 did not exceed 35 per cent for any of the respondents. In the Agency's Shippers Survey, some companies reported shipping substantial portions of their liner traffic under service contracts with shipping conferences in 1993; yet, the proportion of cargo shipped under service contract rates was smaller than in 1992.

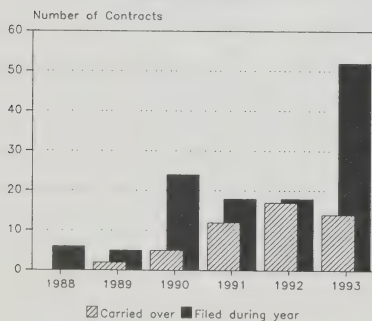
Conference Perspective on Competition

More than one third of conferences responding to the Survey of Shipping Conferences indicated that, on average, their rates had decreased over the previous year. This was attributed primarily to competition between conference members and non-members' competition as well as to general market conditions.

In addition to rate reductions negotiated with shippers, one third of respondents indicated that their conference had initiated rate reductions in 1993. The most frequently accepted justifications for rate reductions

FIGURE 10.6

Service Contracts Filed with the Agency
1988 - 1993



were: competition from non-conference operators, prevailing market conditions, competition from alternative routes, competition from foreign suppliers, and entrance to a new market.

As in 1992, over 90 per cent of respondents indicated that *SCEA* had no greater impact on conference business than it did in the previous year.

Shippers' Perspective on Competition

Competition among marine carriers is more evident in off-shore traffic.

Shippers responding to the Shippers' Survey indicated that the willingness of marine carriers to compete with each other for their traffic in 1993 was somewhat higher in the international (off-shore) category than in the domestic, Canada-U.S. and Canada-Mexico trades. However, for both domestic and international (including U.S. and Mexico) marine traffic, shippers downplayed the importance of competition. The factors rated most important by respondents in maintaining their competitive position in the marketplace were: reliability of service, damage-free transportation, carrier cooperation, and frequency of service. Transportation legislation and competition between carriers, modes and between Canadian and foreign carriers were rated least important.

The overall average price increase reported by shippers for international marine transport was 1.08 per cent, indicating that competitive pressures kept rates under fairly strict control.

The large majority of respondents reported that *SCEA* had no known effect in enhancing their companies' ability to compete internationally in 1993.

Canadian Ports

Port competition hinges on price and time-to-market.

Canadian ports compete with each other to some extent, for example, Vancouver versus Prince Rupert, Thunder Bay versus lower St. Lawrence ports, and Halifax versus Montreal, but with the continuing integration of North America's inland transportation system, U.S. ports seriously threaten to siphon off Canadian import and export traffic.

Port competition hinges on two key factors: price and time-to-market. The price factor incorporates port charges, labour agreements, inland rates, and the Canada-U.S. exchange rate. Time-to-market includes such variables as first/last port of call, loading/unloading facilities, hours of service, electronic data interchange systems, rail/truck access, and direct inland routings. Canadian ports have joined a broad marketing initiative known as Advantage Canada, bringing together the ports, railways, trucking associations, the Coast Guard, and Transport Canada to coordinate seamless, quality transportation services and promote the advantages of Canadian routings.

Survey of Freight Forwarders

In 1993, about one in three freight forwarders, compared to one in two in 1992, reported up to 10 per cent of their clients' inbound or outbound cargo was transshipped through U.S. ports in 1993. As in 1992, 60 to 65 per cent of forwarders who transshipped cargo through the U.S. in 1993 were influenced first by the absence of direct shipping services to and from Canada and second by freight rates.

In 1993, over 278,000 TEUs of Canadian traffic were diverted through American ports; an increase of approximately 20 per cent over the two previous years. U.S. west coast ports handled the lion's share of Canadian cargo, mainly at Seattle/Tacoma, while the port of New York was the dominant diversion point for east coast traffic. Some Canadian containers are handled through Miami and southern Gulf ports.

The major shipping lines carrying Canadian cargo to and from U.S. ports in 1993 were essentially the same as in the previous two years. On the west coast, "K"Line/MOL, APL/OOCL, NYK/NOL, COSCO and Evergreen, also calling at Vancouver, saw their Canadian cargo handlings decrease in 1993. In contrast, Hapag-Lloyd/Nedlloyd, Sea Land/Maersk and Hanjin, none of which call at Vancouver, registered major increases in Canadian container traffic through U.S. ports. On the east coast and in the Gulf, P&O Containers and Nedlloyd were major handlers of Canadian cargo while Conavan and Crowley American Transport Inc. increased their volume of Canadian cargo handled in the South American trade.

Information on U.S. containerized cargo diverted through Canadian ports is sketchy; however, it is estimated that some 1.3 million tonnes of U.S. export cargo and 1.2 million tonnes of import cargo, or roughly 250,000 TEUs, were handled through Canadian ports of Halifax and Montreal in 1992.

To compete more effectively with U.S. ports and protect their market share, the three major Canadian ports have adopted individual approaches.

The Port of Montreal capitalizes on its inland location and high-speed intermodal links to major markets in Canada and in the U.S. north-east and mid-west. It is estimated that more than half of Montreal's container traffic originates or terminates in the U.S. In 1993, port authorities focused on controlling operating costs, while maintaining a freeze on general tariffs, retaining its tariff incentive program for containerized cargo, and announcing enhanced tariff incentives for 1994. The port also increased vessel handling capacity in the St. Lawrence channel above Quebec City by completing a dredging project with the Coast Guard.

The Port of Vancouver supplemented its status as North America's largest bulk port with approval for the development of the \$220 million, state-of-the-art, deep-water Deltaport Container Terminal which will almost double the port's container throughput capacity. The project is designed to keep Vancouver competitive with the ports of Seattle/Tacoma and recapture diverted Canadian shipments. The port also focused on controlling operating costs in 1993 and held its general tariffs at 1992 levels.

Survey of Port Terminal Operators

Port terminal operators were asked to identify the impact, whether positive, negative or nil, of several factors on the viability of their operations in 1993. Inland surface transportation, technological changes, and intermodal developments were each identified as having positive impacts on port terminal operations. Costs, competition from Canadian and U.S. ports, and rationalization of shipping lines were each identified as having negative impacts on operations. For each factor, at least half of the respondents (from 51 to 81 per cent) indicated that the viability of their operations was not affected by any factor except costs. Costs was the factor identified the most frequently as having a negative impact.

In the assessment of the railways' willingness to compete with each other and with other modes for traffic moving through their terminals, 44 per cent of the respondents indicating that the railways were "interested", with another 13 per cent indicating that they were "very interested". The remaining 43 per cent described the railways' as "indifferent" or "not interested at all" in competing for traffic.

TABLE 10.9
Impact of Selected Factors on Port Terminal Operations

	Positive Impact	No Effect	Negative Impact
	<i>% of Respondents</i>		
Inland Surface Transport Services	25	58	17
Technological Changes	32	67	2
Intermodal Innovations	13	78	9
Operating Costs	19	41	40
Competition from Canadian Ports	5	66	29
Competition from U.S. Ports	3	73	24
Rationalization Programs of Shipping Lines	6	81	13
Other	14	14	71

The **Port of Halifax** emphasizes the combined advantages of its deep-water harbour, an advanced EDI program, a new intermodal terminal, and double-stack rail service direct to Montreal, Toronto, and, in the future, Chicago via the Sarnia Tunnel. Halifax's deep-water harbour enables large liner vessels to "lighten off" before proceeding to shallower east coast U.S. ports, and to "top up" in the reverse direction. These first call inbound/last call outbound services offer the shortest transit times to overseas points. CN's new domestic intermodal (LASER Service) terminal is expected to improve transit times as well as reduce costs for inland rail transportation. Like the other major ports, Halifax exercised tight control over operating costs and froze its general tariffs in 1993.

Domestic Bulk Shipping

In the domestic bulk shipping market, a number of factors dictate competition levels:

- the significant amount of vessel overcapacity in the Great Lakes/St. Lawrence system, due primarily to declining grain, coal and iron ore traffic;
- pressures on shippers and receivers utilizing the vessels, especially steel industry customers, to cut costs during the downturn in their market, and passing these pressures on to marine carriers;

- competition from Canadian railways, especially for down-bound cargoes such as grain, barley and potash, forcing marine prices down; and
- increased cost of ancillary services on the system, especially Seaway tolls and pilotage, forcing shippers to look for ways to cut their overall transportation costs.

Northern Marine Resupply

Mackenzie/Western Arctic

Some intra-modal marine competition exists in the Mackenzie system, but none occurs east of the delta to coastal points in the western Arctic. Cooper Barging and Coastal Marine are much smaller than NTCL and compete only on limited stretches of the Mackenzie River. Competition on the river is inhibited by the dominance of NTCL's large-scale operations, the limited traffic base and the fact that under the law, new entrants or additional capacity cannot be licensed if it is to destabilize the system.

NTCL maintains a large-scale, multi-function transportation operation including maintenance/repair, warehousing, camp management, and other related services. Recently, the company has been developing a new resupply market on the north slope of Alaska. Cooper Barging and Coastal Marine are niche competitors.

Survey of Northern Marine Resupply Users

The single theme expressed most frequently by respondents in the Mackenzie/western Arctic system was that rates and service levels would be improved by more competition among the carriers. However, this was countered by the second most frequent comment: traffic volumes in the system were insufficient to support more competitors. Another group felt that the status quo should be maintained. The same three positions dominated the responses of Athabasca shippers and users of the Eastern Arctic Sealift, but in the latter case, the advocates of increased competition were a much larger majority.

The most significant competition in the Mackenzie and western Arctic system is with trucking and air services. Community resupply has not been captive to the river system since the completion of the Dempster highway in 1979. Trucking competition now operates year-round on this all-weather highway to Inuvik, and during the winter months on temporary roads to Fort Good Hope and Tuktoyaktuk. Diversion of Mackenzie River deck cargo to trucks has continued and accounts for more than 50 per cent of community resupply traffic since 1986. The barges, however, remain the most viable option for moving bulk fuel and heavy cargoes. Inuvik, Norman Wells, and Cambridge Bay have regular combi-jet service which provides substantial capacity, although at premium prices.

Athabasca

As in the Mackenzie system, competition is inhibited by a limited traffic base and regulatory restrictions on the licensing of new entrants. However, there is competition from other modes in this system, with the availability of trucking service over a winter road into Fort Chipewyan. By offering competitive price and delivery time, trucking companies have diverted shipments of food, fuel and building supplies from the barges. Most shippers supplement their use of trucks and barges with air freight

but this is not really a competitive alternative in either of price or capacity.

A. Frame, the dominant carrier, offers the largest fleet capacity and schedules service to all points in the Athabasca system, sailing at two- to three-week intervals. The company caters to larger shippers, three of which provided almost 80 per cent of its total tonnage in 1993. The other two licensed competitors are MacDonald Marine Transport Ltd., and Lake Athabasca Transport Ltd. Emil Gerard operates smaller-scale equipment, offers a higher level of service at premium prices for weekly scheduled service only between Fort McMurray and Fort Chipewyan.

Keewatin

The limited traffic base in this system allows little room for competition. NTCL is the sole operator of marine services to the six communities served. One community, Rankin Inlet, has regular combi-jet service.

Eastern Sealift

Competition in this system is mostly intra-modal marine. Some of the points served — Iqaluit, Nanisivik, and Resolute — also have regular combi-jet service.

The Coast Guard tendering process is open to all Canadian shipping operators, and does not preclude either successful or unsuccessful bidders from making private arrangements with Sealift shippers. In addition, the Government of the Northwest Territories began the tendering bulk fuel supply in 1993, opening up this traffic to international competition.

Conclusions

The "divorce" of transportation from regulatory ties and its "marriage" to competitive forces in 1988, have not been easy, partly because of the lingering recession. Competition in a growing market environment differs from competition in a stagnant or declining market environment in both the intensity and degree of rivalry between carriers.

Competition has been intensified by a combination of economic recession, globalization and deregulation.

Based on the evidence gathered by the Agency, competition in the transportation industry has intensified in recent years. In part, this intensification of competition came from carriers having to face lower demand levels produced by the recession. Thus, carriers were forced to compete more aggressively to simply maintain a given level of demand for their services. At the same time, rapid globalization challenged competitive positions and fuelled a drive to improve competitiveness. These changes placed more pressure on the transportation sector to improve its contribution to global competitiveness. Finally, domestic economic regulatory reform and freer regulatory frameworks in other countries opened the transportation market to broader competitive forces.

Performance observed in recent years has demonstrated that a more competitive marketplace, like a regulated one, cannot protect an industry against economic downturns. In a recession, lower demand levels translate into excess capacity which induces to consolidation, integration or merger initiatives. Such initiatives raise concerns that their benefits may not be sufficient to outweigh the fears of reduced competition, resulting from the consolidation of competing operations. The resulting public policy dilemma that ensues is not easily addressed, as the question of competition is a broader institutional one which transcends economic principles.

Competition is not duplication of services. Carriers which only duplicated their competitors' services, without differentiating their products, have faced harsh market realities.

The proper balance — voluntary or compulsory — among competition, integration and inter-carrier coordination varies from one situation to another and from one moment to the next. This explains why this difficult issue must be subject to constant attention and concern.

SAFETY

Highlights of 1993

Fatalities

In 1993, there was a small increase in the number of fatalities involving Canadian-registered commercial aircraft while the number of fatalities resulting from train or marine accidents went down.

Injuries

The number of shipping related injuries fell by 25 per cent while the number of train injuries were 28.9 per cent lower.

Accidents

The number of air accidents fell to their lowest level since 1984. The number of rail accidents increased by 6.3 per cent while in marine services, accidents decreased by 16 per cent.

Trucking Services

New regulations on hours of service were proposed by Transport Canada. Despite its promulgation in 1988, the National Safety Code was not fully implemented in all jurisdictions at year end. The first three years of operations of the Transportation Safety Board of Canada were evaluated by a Review Commission.

Introduction

This section reviews safety records and initiatives for the year 1993.

The safety records examined here include information on the number and types of accidents and the number of fatalities and injuries in air, marine and rail services. Comprehensive data related to trucking accidents in Canada are still not available.

The *Aeronautics Act* governs safety aspects of Canada's air transportation industry. Comprehensive amendments to this legislation, made in 1985, were designed to provide continuing high standards of airline safety.

The *Canada Shipping Act*, the *Arctic Waters Pollution Prevention Act* and the *Transportation of Dangerous Goods Act* govern safety aspects of Canada's marine transportation.

The *Railway Safety Act* governs safety in rail transportation. Transport Canada is responsible for rail and trucking safety regulations. The National Safety Code (NSC) defines the safety rules for the trucking industry. Although promulgated under federal jurisdiction, the NSC is implemented by provincial authorities.

The *Canadian Transportation Accident Investigation and Safety Board Act* of 1989 established an independent multi-modal agency, the Transportation Safety Board of Canada, to investigate transportation accidents and make safety recommendations.

The Transportation Safety Board of Canada provided revised 1992 figures and preliminary 1993 data for this report.

Air Services

Accidents involving Canadian registered commercial aircraft declined to their lowest level since 1984.

*For the tenth consecutive year, Air Canada and Canadi*n operated without a fatal accident.*

The Transportation Safety Board of Canada's 1993 statistics indicate that accidents involving Canadian-registered commercial aircraft declined to their lowest level since 1984 and that fatal accidents, which remained unchanged from last year, are at their lowest level since 1985. Fatalities, however, were up from last year when they were at their lowest level for the last ten years. The increase reflects, in part, the crash of an Air Manitoba HS-748, that claimed seven lives. In 1993, 177 accidents involving commercial aircraft occurred. Of these, 18 were fatal resulting in 53 deaths. For the tenth consecutive year, the two major airlines, Air Canada and Canadi*n, operated without a fatal accident.

Canadian legislation requires the reporting of certain types of "incidents", (i.e., occurrences other than accidents) which largely involve

a loss of separation in air traffic control. In 1993 there were 384 incidents reported, a decline for the third consecutive year.

Rail Services

The number of train accidents increased in 1993 while fatalities and injuries went down.

The number of train accidents, including collisions, derailments and crossing accidents increased from 819 in 1992 to 871 in 1993, an increase of 6.3 per cent. A regional breakdown of train accidents is depicted in Table 11.1 for 1992 and 1993. The overall increase in train accidents was due primarily to a 25 per cent growth in the number of terminal accidents. The number of crossing accidents fell by 6.2 per cent from 1992, while the number of main-track collisions remained virtually constant. The province of Ontario experienced the largest increase from the previous year, with 27 more accidents. A jump in the number of terminal train accidents in 1993 contributed to Ontario's overall increase.

TABLE 11.1
Number of Train Accidents by Region

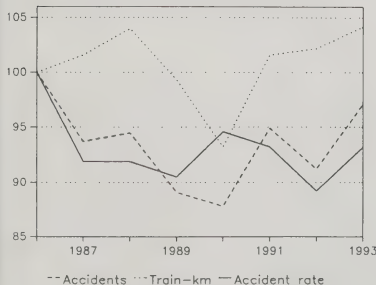
	1992	1993
Atlantic	54	54
Quebec	159	156
Ontario	247	274
Manitoba	75	89
Saskatchewan	76	76
Alberta	115	120
British Columbia	93	102
Total	819	871

FIGURE 11.1

Train Accident Rate

(Train accidents per million train-kilometres)

Index 1986=100



In 1993, the number of train-kilometres was estimated to have increased by almost two per cent from 1992. The accident rate, that is the number of accidents per million train-kilometres, also went up to 6.9 in 1993 from 6.6 in 1992. Figure 11.1 illustrates the trend observed in accident rates since 1986, along with train accidents and train-kilometres. The accident rate decreased by almost seven per cent over this period.

Although train accidents were up in 1993, the number of fatalities and injuries resulting from train accidents went down. Table 11.2 depicts, by region, the number of fatalities and injuries resulting from train accidents for 1992 and 1993. Similar to 1991, all of the train fatalities in 1993 resulted from crossing accidents. In 1992, two fatalities occurred as a result of main-track accidents. As in previous years, Ontario was the province with the highest number of fatalities. However,

TABLE 11.2
Number of Train Accident Fatalities and Injuries
by Region

	1992		1993	
	Fatalities	Injuries	Fatalities ¹	Injuries
Atlantic	2	13	3	13
Que.	17	64	9	40
Ont.	31	103	24	66
Man.	1	21	5	18
Sask.	9	25	3	19
Alta.	14	33	8	25
B.C.	1	36	4	29
Total	75	295	56	210

Note: 1992 figures are revised and 1993 are preliminary.

¹All fatalities in 1993 resulted from crossing accidents.

Ontario's fatalities resulting from train accidents came down by 22.6 per cent from 1992. In 1993, there were fewer main-track collision and derailment injuries, terminal collision and derailment injuries and grade-crossing injuries. Similar to 1992, grade-crossing injuries accounted for the majority, almost 83 per cent, of total train-accident injuries. The number of train accident injuries decreased in every region except Atlantic Canada, where the number remained constant.

Safety Promotions

CN North America won a safety award for the third consecutive year.

In 1993, CN North America won the U.S. National Safety Council's railroad public safety activities award for a third consecutive year. More than 400 railways in Canada and the United States were considered for this award. This award was presented to the railway for its extra effort in safety for employees, their families and for the general public. CN North America announced the first winners in its safe handling award program and presented plaques to shippers of regulated goods at 37 plants and refineries across Canada.

CP Rail System also initiated several safety-related initiatives in 1993. In an attempt to raise the level of safety awareness at level crossings, CP Rail simulated an accident at a crossing and made several safety recommendations. A monitoring and enforcement program was initiated at railway crossings on Vancouver Island, in an effort to reduce accidents between trains and motor vehicles. A special "safety train" sponsored by AMTRAK and CP Rail System travelled from Montreal to Albany, New York in December. The purpose of this event, similar to school

visits and public display participation, was to raise awareness of level crossing safety, along with the dangers of trespassing on railway tracks.

Trucking Services

The *MVTA, 1987* included a provision for the reverse onus test to expire on December 31, 1992. In its place, a national safety fitness test was implemented and was based on the National Safety Code (NSC), a code which came into effect on January 1, 1988. Regulations regarding hours of services remains an issue in the trucking industry.

National Safety Code

*National Safety Code not fully
implemented at year end by
all jurisdictions.*

The National Safety Code contains 15 standards. Responsibilities for the implementation and the enforcement of the standards rest with the provinces and the territories. Table 11.3 shows the status of implementation in each province at the end of 1993. Some standards were still not fully implemented at year end. The only standard that has been fully implemented in all provinces is the standard on road inspection. In some jurisdictions, some standards have either been partially implemented or not implemented at all.

TABLE 11.3
Status by Jurisdiction of the Implementation of the National Safety Code Standards

Standards	BC	Alta	Sask	Man	Ont	Que	NB	NS	PEI	Nfld	YK	NWT
Single driver licence concept	○	○	●	●	○	○	○	●	○	●	●	●
Knowledge and performance tests	●	●	○	●	○	○	●	○	●	○	○	○
Driver examiner training program	●	●	●	●	○	○	●	●	●	●	-	-
Classified driver licensing system	○	●	●	○	○	○	●	○	○	○	○	○
Self-certification standards and procedures for drivers	●	●	●	●	○	●	●	●	-	-	-	-
Medical standards for drivers	●	●	○	○	○	○	●	○	●	●	●	-
Carrier and driver profiles	○	○	○	○	○	●	-	○	●	●	●	●
Short term suspension	●	●	○	●	○	-	○	-	●	-	●	●
Hours of service regulations	○	●	-	●	●	●	●	○	○	○	●	○
Security of loads	○	○	○	○	○	○	○	○	-	●	●	●
Commercial vehicle maintenance standards	●	●	●	●	○	○	-	●	-	●	●	●
CVSA on-road inspections	●	●	●	●	●	●	●	●	●	●	●	●
Daily trip inspection report	○	○	-	-	●	○	-	●	●	●	●	●
Facility audits	○	○	○	○	●	○	-	-	-	-	●	●
First Aid	v	v	v	v	v	v	v	v	v	v	v	v

● = Implemented ○ = Partially implemented - = Not implemented v = Voluntary

Hours of Service

Proposed regulations on hours of service aim to reduce highway accidents due to driver fatigue.

The Department of Transport published a proposed regulatory text on *Commercial Vehicle Drivers Hours of Service Regulations, 1993*. The primary objective of these regulations is the reduction of driver-at-fault highway accidents due to driver fatigue. The *Commercial Vehicle Drivers Hours of Service Regulations* were last amended on July 5, 1989. Due to the numerous and complex changes being considered, the intent is to revoke current regulations and to replace them with the new proposals.

The new regulations will provide increased flexibility for the trucking and bus industry in terms of scheduling driving assignments. The majority of changes are administrative in nature and should not result in additional costs to the industry.

The proposed hours of service regulations address maximum driving times of commercial bus and truck drivers employed or otherwise engaged in extra-provincial transportation. The regulations also require drivers to keep a record of their daily driving and other work activities in a prescribed format and to make those records available to designated enforcement officials upon request.

Under the proposed regulations, no driver would drive more than 13 hours following at least eight consecutive hours of off-duty time. The U.S. limit is 10 hours. Also, drivers would be limited to:

- 60 hours of on-duty time during seven consecutive days;
- 70 hours during a period of eight consecutive days;
- 120 hours during a period of 14 consecutive days.

In addition, a driver shall have a minimum of 24 consecutive hours of off-duty time before completing 75 hours on-duty.

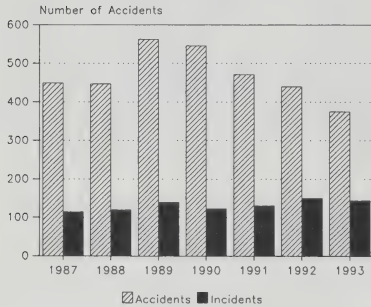
The proposed regulations expand the definition of on-duty time to include the time a driver spends performing any work for compensation for any non-motor carrier. The proposed regulations also expand the definition of on-duty time to include the time spent by the driver resting in or otherwise occupying a commercial vehicle except for the time spent resting in a sleeper berth if the vehicle is so equipped. A driver can be also taken out of service for eight hours for failure to produce a daily logbook for inspection.

Fatigue Study

The Federal Department of Transport, in cooperation with the Canadian Transport Research Institute, studied the effects of driver fatigue in a study entitled "Impact on Driver Fatigue". The conclusions of the study are expected to be published in mid-1994. They will be circulated for comment.

Marine Services

FIGURE 11.2
Marine Accidents and Incidents
(Excluding Fishing Vessels)
1987 - 1993

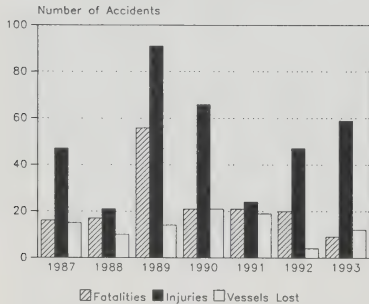


According to figures released by the Transportation Safety Board of Canada (TSBC), a total of 765 marine accidents occurred in 1993. This represents a 16 per cent decrease from the 838 reported in 1992 as a result of fewer shipping accidents.

Excluding fishing vessels, the number of marine accidents, incidents and fatalities all declined in 1993, as shown in Figures 11.2 and 11.3. Fatalities registered the highest drop at 55 per cent. On the other hand, the number of shipping-related injuries and lost vessels both increased by 25 to 200 per cent, respectively. The latter increase was more the result of a sharp drop from 1991 to 1992 in vessel losses reported by the TSBC.

The figures reported here differ significantly from data presented in previous years as the actual number of occurrences as opposed to the number of vessels involved in such occurrences is now reported.

FIGURE 11.3
Marine Fatalities, Injuries and Vessels Lost
(Excluding Fishing Vessels)
1987 - 1993



Canadian Transportation Accident Investigation and Safety Board Act Review Commission

The Canadian Transportation Accident Investigation (CTAISB) and Safety Board Act Review Commission was formed pursuant to the *Canadian Transportation Accident Investigation and Safety Board Act* of 1989, to review the first three years of operation of the Transportation Safety Board of Canada (TSBC), the Agency responsible for investigating transportation accidents in Canada.

As part of its mandate, the CTAISB Act Review Commission undertook extensive consultation throughout Canada with interest groups and stakeholders concerning transportation safety issues.

On January 29, 1994, the Commission tabled its report in the House of Commons. The major findings and recommendations of the Commission included:

- * The Commission recognized the challenges faced by the TSBC when a single multi-modal transportation accident investigation organization was formed. The Commission recommended that the Agency apply basic principles of risk management to optimize the use of limited resources to achieve the greatest impact on transportation safety.
- * The Commission also recommended more openness on the part of the TSBC with the transportation community and a greater participatory role for observers during investigations. The Commission also recommended that the Board act to increase its public profile, to improve its interaction with the transportation community and to be more confident in carrying out its legislated mandate.
- * The Commission found that the TSBC has had difficulty evolving from its predecessor, the Canadian Aviation Safety Board (CASB). It was found that the air mode still dominates many aspects of the TSBC administration. TSBC's direction, processes and organizational culture were strongly influenced by CASB.
- * On TSBC's mandate, the Commission recommended (1) that Parliament addresses the jurisdictional overlap that exists between the TSBC and National Energy Board on the investigation of pipeline accidents and (2) that its functional and geographical authority be expanded and enhanced, especially for extra-provincial motor vehicle and pleasure craft (marine) occurrences.
- * The Commission recommended amending the Act's confidentiality rules to protect witnesses against self-incrimination.

ISSUES

During 1993, a number of major cases handled by the Agency shared common themes: markets are becoming more competitive for carriers and the slow recovery contributed to an unfavourable market environment. The railway cases dealt with the rationalization of duplicate track and facilities and abandonment of lines. Abandonment cases concerned lines that were generating unprofitable levels of traffic. The two major railways are continuing to discuss an amalgamation of operations over parts of their systems. Amalgamation is viewed by the railways as a possible solution to excess capacity prompted by competition and shifting traffic patterns.

Similarly, the major air case involving the alliance between PWA and AMR and PWA's exit from Gemini — was brought on by the excess capacity in the airline industry during the lingering recession. The economic slowdown has reduced the demand for air services. Both Air Canada and Canadi*n have been shifting capacity from domestic to both transborder and international markets and have been seeking new partnerships outside the country. Such re-alignments are in response to the restructuring needs in the transportation industry required to stay competitive under tough recessionary market conditions.

These cases brought a number of issues to the Agency's attention. This section summarizes these issues and highlights other concerns. These issues will continue to dominate the transportation industry during the next few years.

General Issues

- The challenge of maintaining a viable and competitive transportation industry remains the paramount issue.
- International trade agreements such as the GATT, NAFTA, and the Free Trade Agreement increase the opportunities for Canadian firms to operate in an environment with lower tariffs and more competitive continental and worldwide markets. Canadian shippers and carriers continue to re-position themselves to a growing North-South flow of trade.
- The importance of transportation for the mobility of people, the environment, domestic commerce, and the competitiveness of the nation in the international marketplace should be reflected and confirmed in government decisions and policies.
- The costs of meeting all of the demands for infrastructure exceed the available resources of governments.
- The split jurisdictions that deal with transportation issues — federal, provincial and municipal authorities — are not conducive to making the best-informed investment decisions that would optimize the trade-offs among aviation, mass transit, highways, marine or rail.
- The growing use of telecommunications as a substitute and competitor for passenger transportation is still inadequately recognized in government and transport-industry policies and decisions.
- Transportation policy has often considered regional development goals along with national goals but offers little guidance where regional and national objectives are incompatible.
- Improving access to travel is an important issue for persons with disabilities. The Government of Canada is committed to the goal of integrating persons with disabilities into the mainstream activities of society, and accessible transportation is the critical link in allowing this to take place. With its responsibilities for setting regulations and resolving complaints, the Agency has made air travel more accessible to travellers with disabilities, has prepared a comprehensive examination of accessibility of extra-provincial bus services and has issued regulations to ensure a standard level of training for personnel in the federal transportation network who serve travellers with disabilities.

Air

- Dramatic changes in the airline industry have been at the forefront of competition and deregulation issues. The key both airlines serve domestic, transborder and international markets. The nature of competition in these markets varies in terms of fairness and access. In some markets, private carriers must compete against state-owned and subsidized carriers.
- There is a need to define the policies and actions that will ensure that domestic competition is retained while maintaining the competitiveness of Canadian air carriers in international markets.
- The structure of the Canadian airline industry is still being defined. Both Canadi*n and Air Canada were seeking to strengthen their market positions through alliances with foreign carriers. Future policies will have to be flexible enough to permit the evolution of the industry without destroying the air services Canadians have enjoyed and require.

Rail

- Dominant issues for CN and CP Rail are abandoning, merging and conveying lines. The conveyance of lines to short-line operators, an activity which occurred more slowly in Canada than in the United States, is a means of preserving service on some lines that might otherwise be abandoned. In Ontario and British Columbia, successor-labour-rights legislation. This kind of legislation which obligates a new railway to honour the collective agreements of former owners, is discouraging potential short-line operators from further investing in lines.
- Shippers have expressed the views that the preservation of competition will have to be considered in the railways' plans to rationalize and merge operations. Shippers who now enjoy competitive rail service, either because they are physically connected to two or more carriers or through competitive-access provisions, will require safeguards for continued competitive choices.
- The two railways claim that competing highway carriers have a competitive advantage as they do not have to pay the full cost of the highway infrastructure they use. Both CN and CP Rail continue to be concerned with the impact of the Canadian tax system on the railway industry, kindering its competitiveness vis-à-vis that of the United States.

Marine

- Global competition significantly affects Canadian ports and marine interests. Competition with U.S. ports directly influences Canada's exports and imports. The choice of ports rests on these conditions: more flexible labour costs, harmonious labour relations and the quality of inland rail connections, particularly for double stack intermodal movements.
- The development of increasingly larger ships threatens ports which are incapable of handling deep-draft vessels or which are not close to major inland markets. Ports receiving these ships, will need to provide efficient integrated systems for moving goods inland to minimize the total costs of movement.

Trucking

- A lack of uniformity in provincial regulations related to trucking continues to be a major irritant to the industry and an impediment to greater efficiency. Canada still lacks uniform national standards for weights and dimensions of equipment.
- Cabotage continues to be considered a serious problem for the Canadian trucking industry. The issue is tied to differences in enforcement at the Canada-U.S. borders of each country's respective rules and regulations.
- Inequality exists between Canada and the United States over cabotage regulations. Canadian regulations are more generous in the application of permissible cabotage. This allows U.S. trucking companies more cabotage opportunities in Canada while similar opportunities are denied to Canadian trucking firms in the United States.

Transportation and Native-Related Matters

During 1993, several matters involving native concerns had an impact on the rail transportation sector. Several concerned Indian bands in British Columbia. In April, 1993, the Federal Court of Appeal released a decision that ruled against a bid by seven Indian bands. These bands wanted to tax rail lines which ran through their reserves. CP refused to pay, claiming the company legally owned the land. The railway claimed it already pays tax to provincial and municipal governments along its lines and the property was not part of any Indian reserve. When CP first went to the Federal Court, the Indian bands argued that the rail company should have gone to tribunals set up by Natives. The appeal court stated that this question was beyond the jurisdiction of Native tribunals.

In February and May of 1993, the Agency issued two decisions in which Native claims were raised. Both decisions related to CN's construction

of a larger diameter tunnel under the St. Clair River at Sarnia, Ontario to handle double stack container rail cars. These decisions had been opposed by two native groups. The Walpole Island First Nation claimed that the lands required for the undertaking under the St. Clair River had not been surrendered to the Government of Canada. The Chippewas of Sarnia Band Council stated that a portion of a street to be intersected by the proposed CN installations was reserve status land, with title vested in the federal government in trust for the Chippewas. In both cases, the Agency was of the opinion that Section 35 of the *Indian Act* and/or native land interests did not prevent the Agency from exercising its jurisdiction. In the Agency's view, neither the interest of the Indian bands in the lands, nor any future negotiations with CN or any other party, would be prejudiced or jeopardized by the consideration of this matter, pursuant to the *NTA, 1987*. The Chippewas withdrew their interventions and objections. An appeal to the Federal Court of Decision 112-R-1993 by the Walpole Island First Nation was denied in May, 1993.

In late August, several Indian bands blocked Canadian National Railway's main line to the Port of Vancouver for six days. CN was caught in the middle of a dispute between the Native bands and the Department of Fisheries and Oceans, after a Fraser River salmon opening was cancelled. A British Columbia Supreme Court order allowed the RCMP to dismantle the blockade.

Appendix A.1

Sources of Information Used in the Review

- **List of government departments and agencies**

- Statistics Canada
- Transport Canada
- Natural Resources Canada
- Consumer and Corporate Affairs
- Labour Canada
- Canada Labour Relations Board
- Investment Canada
- Office of the Superintendent of Bankruptcy
- Canada Ports Corporation
- Finance Canada
- Bank of Canada
- Transportation Safety Board of Canada
- Provincial/Territorial Transport Boards
- St. Lawrence Seaway Authority

- **Other**

The Agency considered information from:

- Carriers,
- the Conference Board of Canada,
- Canada's major financial institutions,
- Canadian Shipowners Association,
- Canadian Trucking Association,
- Provincial Trucking Associations,

and three private U.S. sources of information:

- the Official Airline Guides,
- the Airline Tariff Publishing Company,
- the Journal of Commerce's PIERS (Port Import/Export Reporting Service).

Appendix A.2

Agency's 1993 Survey Program

- **Agency's 1993 Shippers' Survey**

Supported by the following Associations:

Association of International Automobile Manufacturers of Canada
"Association québécoise de la distribution de fruits et légumes"
Canadian Chemical Producers Association
Canadian Exporters' Association
Canadian Fertilizer Institute
Canadian Horticultural Council
Canadian Importers' Association
Canadian Industrial Transportation League
Canadian Manufacturers' Association
Canadian National Millers' Association
Canadian Produce Marketing Association
Canadian Pulp and Paper Association
Canadian Petroleum Products Institute
Canadian Shippers' Council
Coal Association of Canada
Council of Forest Industries of British Columbia
Grocery Products Manufacturers of Canada
Mining Association of Canada
Motor Vehicle Manufacturers' Association
Propane Gas Association of Canada Inc.
Quebec Food Processors Association
Quebec Lumber Manufacturers' Association
Quebec Mining Association
Retail Council of Canada

- **Air Surveys**

- Canadian Professional Sales Association
- North West/Maritime Commercial Travellers' Association
- Northern Air Survey

Representatives of communities, and
Native bands located in northern Canada

● Marine Surveys

- **International Freight Forwarders** supported by:
The Canadian International Freight Forwarders Associations
- **Northern Marine Survey** supported by:
Arctic cooperatives,
Canadian Coast Guard,
Federal, provincial and territorial governments,
Indian bands,
N.W.T. Association of Municipalities
Northern businesses,
Officials from northern communities.
- **Port Terminal Operators** endorsed by:
The Canada Ports Corporation,
Transport Canada's Public Ports and Harbours Directorate
- **Shipping Conferences**

● Motor Carrier Interview Program

Motor carriers
Officials from provincial, regional and national trucking associations
Provincial licensing boards
Provincial transportation ministries

Appendix A.3

The Agency's 1993 Survey Program

Sample Size and Returns

	Sample Size	Returns Total
Shippers' Survey	3,463	444
Canadian Professional Sales Association (CPSA) Survey	3,220	898
The Northwest Maritime Commercial Travellers' Association Survey	1,492	409
Northern Air Survey	1,089	211
Shipping Conferences Survey	24	16
Freight Forwarders' Survey	195	65
Northern Marine Survey	713	159
Port Terminal Operators' Survey	238	65
Motor Carrier Interviews	102	102

Regional Distribution of Survey Responses

	Shippers' Survey %	CPSA Survey %	North West/ Maritime CTA Survey %
Newfoundland	3.7	1.4	1.1
Prince Edward Island	1.3	0.3	1.3
Nova Scotia	5.1	3.4	9.4
New Brunswick	5.1	2.2	4.3
Québec	20.3	26.8	1.1
Ontario	26.9	43.3	9.1
Manitoba	7.8	2.2	14.5
Saskatchewan	4.6	2.7	4.6
Alberta	11.5	9.3	32.2
British Columbia	12.0	8.5	22.5
Yukon/Northwest Territories	1.7	-	-
	Northern Air Survey %	Motor Carrier Interviews %	
Newfoundland	4.0	1.9	
Prince Edward Island	-	1.0	
Nova Scotia	-	8.8	
New Brunswick	-	10.8	
Québec	9.0	20.6	
Ontario	3.5	21.6	
Manitoba	7.0	7.8	
Saskatchewan	2.5	8.8	
Alberta	8.0	11.8	
British Columbia	2.0	6.9	
Yukon Territory	7.0	-	
Northwest Territories	57.0	-	

Appendix A.4

Sources

Source	Figures	Tables
Air Canada	4.1, 5.1, 5.13, 7.3, 9.1, 9.3, 9.4	5.1, 9.1, 9.3 Appendix B.2
Airlines	5.3, 5.13	
Canada Ports Corporation	4.24, 6.33, 6.34	5.11
Canadian International Freight Forwarders Association	4.25	
Canadian Shipowners Association		4.15
Containerization International, November, 1993		4.9
Eastern Border Transportation Coalition	6.40, 6.41	6.11
Freight Carriers Association of Canada	9.11	
Government Travel Service		10.2
Human Resources Development		Appendix E.3 page 199
Industry Canada		4.16
Journal of Commerce Port Import/Export Reporting Service (PIERS)	6.20, 6.21, 6.22, 6.38	6.7
Mariport Group Ltd.	7.18, 7.19, 7.20, 7.21	
Motor Carrier Interview Program	5.17, 7.9	4.3, 6.4, 6.5, 7.5
Motor Vehicle Manufacturers Association	5.19	

Source	Figures	Tables
National Transportation Agency of Canada		
• Agency's records	4.3, 4.4, 4.5, 4.6, 4.16, 4.17, 4.18, 4.19, 4.20, 4.21, 4.22, 4.23, 5.5, 5.14, 5.15, 6.42, 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.16, 7.17, 10.2, 10.3, 10.4, 10.6	2.1, 4.1, 4.2, 4.10, 4.11, 4.12, 4.13, 5.11, 11.3 Appendix C.1 to C.5
• Canadian Professional Sales Association and Northwest/ Maritime Commercial Travellers' Association Survey	7.1	
• Port Terminal Operators' Survey		5.12, 10.9
• Shippers' Survey	4.9, 5.16, 6.36, 6.37, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9	4.5, 5.5, 5.6, 6.6, 7.1, 7.2, 7.3, 7.4, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8
Office of the Superintendent of Bankruptcy	3.5, 4.13, 4.14	Appendix D.1
Official Airline Guides	5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 6.6, 10.1	5.4, 10.1
Prolog Planning Inc.	6.30	
Provincial and Territorial Licensing (Trucking) Authorities	4.11	4.6, 4.7, 4.8
PWA Corporation	4.2, 5.2, 5.13, 7.3, 9.1, 9.3, 9.4	5.2, 9.2, 9.3 Appendix B.3
Railways		
• Association of American Railroads	9.7, 9.8, 9.9	
• CN North America	5.14	
• CP Rail System	5.15	
• The Railway Association of Canada	4.4, 5.14, 5.15	
• Submission to Agency	8.2, 9.5, 9.6, 9.7, 9.8, 9.9	9.4, 9.5
R.L. Polk Statistics	5.18	5.7

Source	Figures	Tables
St. Lawrence Seaway Authority	6.27, 6.28, 6.29	
Statistics Canada	3.1, 3.2, 3.3, 3.4, 3.6, 4.10, 4.12, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10, 6.11, 6.12, 6.13, 6.14, 6.15, 6.16, 6.17, 6.18, 6.19, 6.20, 6.21, 6.23, 6.24, 6.25, 6.26, 6.32, 6.35, 6.39, 7.2, 8.1, 9.1, 9.2, 9.3, 9.10, 9.12, 9.13, 9.14, 10.5	6.1, 6.2, 6.3, 6.8, 6.9, 6.10, 6.12, 6.13, 8.1, 8.2, 8.3 Appendix E.1, E.2, E.4 pp. 32, 39, 189, 190, 191, 195, 202, 203
Stentor Alliance		10.2
Today's Trucking	4.7, 4.8	4.4
Transport Topics	5.19	
Transport Canada	4.24, 5.4, 6.31	4.14, 5.1, 5.2, 5.3, 5.8, 5.9, 5.10
Transportation Safety Board of Canada	11.1, 11.2, 11.3	11.1, 11.2
U.S. Department of Labor		8.1, 8.2 pp. 190, 191
U.S. Interstate Commerce Commission	4.15, 9.12	

Appendix B.1

Sample Routes

a:	Top 25 routes (Service and Tariff sections)
b:	18 Inter-regional routes (Service section)
c:	14 Atlantic regional routes (Service section)
d:	16 Ontario/Québec regional routes (Service section)
e:	21 Western regional routes (Service section)
f:	57 Northern routes (Service section)
g:	26 affiliate carrier routes (Tariff section)
h:	37 mainline, regional and other routes (Tariff section)
i:	36 northern routes (Tariff section)
j:	40 sample routes (Competition section)

Blanc Sablon-St. Anthony	f,i	Edmonton-Yellowknife	f,i,j
Brandon-Toronto	b	Fredericton-Montréal	b,h
Brandon-Winnipeg	e	Ft. Chipewyan-Edmonton	f
Calgary-Castlegar	e,h	Ft. McMurray-Calgary	f,i
Calgary-Edmonton	a,j	Ft. McMurray-Edmonton	f,i,j
Calgary-Grande Prairie	e,g	Ft. St. John-Watson Lake	f,g
Calgary-Inuvik	f,i	Ft. St. John-Ft. Nelson	f,g
Calgary-Montréal	a	Gander-St. John's	c,g,j
Calgary-Ottawa	a,j	Gillam-Churchill	f,i
Calgary-Toronto	a,j	Goose Bay-Churchill Falls	f,i
Calgary-Vancouver	a,j	Goose Bay-St. John's	f,i
Calgary-Winnipeg	a,j	Goose Bay-Halifax	f,i
Cambridge Bay-Iqaluit	f,i	Grande Prairie-Vancouver	e,i
Cambridge Bay-Yellowknife	f,i,j	Halifax-Fredericton	j
Campbell River-Vancouver	e,h	Halifax-Moncton	c,g
Charlottetown-Halifax	c,h,j	Halifax-Montréal	a,j
Cranbrook-Calgary	e,g	Halifax-Ottawa	a,j
Cranbrook-Vancouver	e,g	Halifax-Saint John	c,h
Dawson Creek-Prince George	f,h	Halifax-St. John's	c,h,j
Dawson Creek-Edmonton	f,i	Halifax-Sydney	c,g
Deer Lake-Wabush	f,h	Halifax-Toronto	a,j
Deer Lake-Montréal	b,h	Hamilton-Montréal	d,g
Deer Lake-Halifax	c,h	Hamilton-Ottawa	d
Deer Lake-St. John's	c,h	Îles de la Madeleine-Québec	d,h
Dryden-Thunder Bay	d,g	Îles de la Madeleine-Halifax	b,g
Dryden-Winnipeg	b,g	Inuvik-Aklavik	f
Edmonton-Grande Prairie	e	Inuvik-Ft. McPherson	f
Edmonton-Inuvik	f,i	Inuvik-Ft. Good Hope	f
Edmonton-Montréal	b,h	Inuvik-Norman Wells	f,i
Edmonton-Regina	e,h	Inuvik-Paulatuk	f
Edmonton-Saskatoon	e	Inuvik-Sachs Harbour	f
Edmonton-Toronto	a,j		
Edmonton-Vancouver	a,j		

Inuvik-Tuktoyaktuk	f	Povungnituk-Inukjuaq	f
Inuvik-Yellowknife	f,i,j	Povungnituk-Sanikiluaq	f
Iqaluit-Coral Harbour	f,i	Prince George-Vancouver	a,j
Iqaluit-Kuujuuaq	f	Québec-Halifax	b,h
Iqaluit-Montréal	f,i,j	Québec-Saguenay	i
Iqaluit-Nanisivik	i	Québec-Sept-Îles	d,g,j
Iqaluit-Ottawa	i	Québec-Toronto	a
Iqaluit-Rankin Inlet	f,i	Québec-Wabush	f,i
Iqaluit-Resolute	f,i	Rankin Inlet-Winnipeg	f,i
Iqaluit-Yellowknife	f,i	Regina-Toronto	b,h
Kamloops-Calgary	e,g	Regina-Vancouver	e,h,j
Kamloops-Edmonton	e	Saint John-St. John's	c,h
Kamloops-Vancouver	e,g	Saskatoon-La Ronge	f
Kangiqsuaq-Quaqtaq	f	Saskatoon-Prince Albert	e
Kelowna-Kamloops	j	Saskatoon-Regina	e,h
Kelowna-Vancouver	a,e,j	Saskatoon-Stony Rapids	f
Kenora-Red Lake	f,i	Saskatoon-Toronto	b,j
Kuujuuaq-Kangisualujuaq	f	Saskatoon-Winnipeg	e,h
Kuujuuaq-Kangirsuk	f	Sault Ste. Marie-Toronto	d,g,j
Kuujuuaq-Tasiujaq	f	Sault Ste. Marie-Ottawa	d,h
Kuujuuaraapik-Inukjuaq	f	St. John's-Toronto	a,j
Kuujuuaraapik-La Grande	f	Stephenville-Gander	c,h
Kuujuuaraapik-Sanikiluaq	f	Stephenville-Halifax	c,g
Kuujuuaraapik-Umiujaq	f	Stephenville-St. John's	c,g
La Grande-Montréal	i	Sudbury-Montréal	d,h
London-Toronto	d,g	Sudbury-Toronto	d,h,j
Moncton-Saint John	c,g	The Pas-Winnipeg	f,i
Moncton-Toronto	b,g	Thompson-Flin Flon	f,i
Montréal-Charlottetown	b,h	Thunder Bay-Toronto	a,j
Montréal-Moncton	b,g	Thunder Bay-Sudbury	j
Montréal-Ottawa	j	Timmins-Toronto	d,h
Montréal-Québec	j	Toronto-Vancouver	a,j
Montréal-Rouyn/Noranda	d,h	Toronto-Windsor	d,h
Montréal-Saguenay/Bagotville	d,h	Toronto-Winnipeg	a,j
Montréal-Sept-Îles	d,h	Vancouver-Dawson Creek	f,h
Montréal-Toronto	a,j	Vancouver-Penticton	e,g
Montréal-Val d'Or	d,h,j	Vancouver-Port Hardy	e,g
Montréal-Vancouver	a,j	Vancouver-St. John's	b
Norman Wells-Yellowknife	f,i	Vancouver-Victoria	a
Ottawa-Edmonton	b,h	Vancouver-Whitehorse	f,i
Ottawa-Fredericton	b,h	Vancouver-Williams Lake	e,g
Ottawa-Moncton	b	Vancouver-Winnipeg	a
Ottawa-Regina	b,h	Wabush-St. John's	f,i
Ottawa-Saint John	b,h	Whitehorse-Yellowknife	i
Ottawa-Toronto	a,j	Winnipeg-Churchill	f,i
Ottawa-Vancouver	a	Winnipeg-Edmonton	e,h
Ottawa-Winnipeg	a,h,j	Winnipeg-Gillam	f,i
Pickle Lake-Thunder Bay	f,i	Yarmouth-Halifax	c,g
Povungnituk-Akulivik	f		

Appendix B.2

Regional Affiliates Fleet Composition

Air Canada Affiliates	Dec. 1992	Dec. 1993	On Order
Air Nova	5 BAe 146-200s 10 Dash 8-100s	5 BAe 146-200s 12 Dash 8-100s	
Air Alliance	14 Dash 8-100s	11 Dash 8-100s	
Air Ontario	15 Dash 8-100s 6 Dash 8-300s	17 Dash 8-100s 6 Dash 8-300s	
AirBC	5 BAe 146-200s 12 Dash 8-100s 6 Dash 8-300s 6 BAe Jetstream 31s 4 DHC-6 Twin Otters	5 BAe 146-200s 11 Dash 8-100s 6 Dash 8-300s 5 BAe Jetstream 31s 4 DHC-6 Twin Otters	
Pacific Coastal Airlines	15 non-jets	14 non-jets	
NWT Air	3 B737-200Cs 1 Lockheed Hercules	3 B737-200Cs 1 Lockheed Hercules	
TOTAL	102	100	0

Appendix B.3

Regional Affiliates Fleet Composition

Canadi*n Partners	Dec. 1992	Dec. 1993	On Order
Air Atlantic	3 BAe 146-200s 11 Dash 8-100s	3 BAe 146-200s 11 Dash 8-100s	
Inter-Canadien	12 ATR 42-300s	8 ATR 42-300s	
Canadi*n Regional (East) ¹	9 BAe Jetstream 31s 5 Embraer 120s 5 Beech 1900Cs	7 ATR 42-300s	
Canadi*n Regional (West) ²	2 Dash 8-100s 14 Dash 8-300s 7 Fokker F28s 3 Shorts SD3-60s 1 Convair CV-580	2 Dash 8-100s 14 Dash 8-300s 8 Fokker F28s 3 Shorts SD3-60s 1 Convair CV-580	
Calm Air	4 HS.748s 2 DHC-6 Twin Otters 1 Beech King Air 200 1 Piper Cheiftain	4 HS.748s 2 DHC-6 Twin Otters 1 Beech King Air 200 1 Piper Cheiftain	
TOTAL	80	65	0

¹ Canadi*n Regional (East) was formerly Canadian Partner.

² Canadi*n Regional (West) was formerly Time Air.

Time Air and Canadian Partner (dba. Ontario Express) were merged in 1993 into Canadi*n Regional Airlines.

Appendix C.1

Notices of Intent to Apply for Abandonment, 1993

(Subsection 160(1) of the *NTA, 1987*)

Province/Railway/ Subdivision	Between Points	Track Miles	Date of Receipt
Nova Scotia			
CN Chester	Summit to Barry's Stillwater Marsh 4.9 - 42.26, incl. 3.5 miles of other trackage	40.86	April 22, 1993
	CN Total Miles	40.86	
Québec			
CN Montréal	Harbour Branch Spur 0.4 - 1.3, incl. St. Patrick Spur 0.0 - 0.4	1.3	June 11, 1993
CN St. Raymond	Shannon to St-Raymond 16.8 - 36.5	19.7	March 31, 1993
	CN Total Miles	21.0	
CP Quebec Central Railway			November 4, 1993
Chaudière	St-Joseph to Lac Frontière 0.0 - 78.5	78.5	
Lévis	Ste-Hénédine to Harlaka 0.0 - 27.5	27.5	
Tring	0.0 - 1.0	1.0	
Vallée	Sherbrooke to Walsh 0.0 - 130.4	130.4	
CP Trois-Rivières	Berthierville Spur off mile 44.0	2.1	February 8, 1993
	CP Total Miles	239.5	
Ontario			
CP Belleville	Scarborough Pit Spur off mile 194.76	2.0	November 17, 1993

Province/Railway/ Subdivision	Between Points	Track Miles	Date of Receipt
CP Belleville	Scarborough Industrial Spur off mile 201.36	0.76	December 8, 1993
CP Chalk River	0.9 - 95.6	94.7	June 11, 1993
CP Chalk River/North Bay	106.0 - 115.3 0.0 - 71.2	9.3 71.2	June 11, 1993
	CP Total Miles	177.96	
CN Graham	Conmee to Superior Jct. 0.0 - 159.5, incl. 13.5 of the Mattabi Mine Spur, incl. 27.3 of other trackage	200.3	August 13, 1993
CN Hagersville	Rymal Spur off mile 18.7	9.4	November 9, 1993
CN Manitouwadge	Hillsport to Geco 0.9 - 23.1	22.2	September 24, 1993
CN Marmora	Picton to Trenton 0.0 - 30.2 incl. 4.2 mile of the Bethlehem Spur	34.4	November 17, 1993
CN Newmarket	Dykstra to North Bay 226.8 - 228.9	2.1	June 14, 1993
CN Strathroy	Petrolia Spur off mile 46.3	4.7	November 9, 1993
CN Thorold	Fonthill Spur off mile 5.2	5.6	November 9, 1993
	CN Total Miles	278.7	
CSXT Blenheim	Ruthven to Blenheim 33.79 - 73.0	39.21	December 20, 1993
	CSXT Total Miles	39.21	
Manitoba			
CN Erwood	Birch River to Baden 22.9 - 50.8, incl. Inland Cement Spur	33.8	August 27, 1993
	CN Total Miles	33.8	
Saskatchewan			
CN Blaine Lake	Paddockwood Jct. to Shellbrook 0.7 - 27.4	26.7	December 14, 1993
	CN Total Miles	26.7	

Province/Railway/ Subdivision	Between Points	Track Miles	Date of Receipt
Alberta			
CN Waterways	Lynton to Waterways 276.0 - 285.9	9.9	April 19, 1993
	CN Total Miles	9.9	
British Columbia			
CP Slocan	Slocan South to Slocan City 0.0 - 31.3	31.3	October 1, 1993
	CP Total Miles	31.3	

Appendix C.2

Summary of Abandonment Applications, 1993

(Subsection 160(4) of the *NTA, 1987*)

Jurisdiction	No. of Applications		
	CN	CP	Total
Nova Scotia	2	1	3
New Brunswick	2	N.A.	2
Québec	3	2	5
Ontario	2	2	4
Saskatchewan	N.A.	2	2
Alberta	1	N.A.	1
TOTAL	10	7	17

Jurisdiction	Mileage		
	CN	CP	Total
Nova Scotia	63.85	10.10	73.95
New Brunswick	140.33	N.A.	140.33
Québec	60.70	87.30	148.00
Ontario	202.40	175.20	377.60
Saskatchewan	N.A.	22.70	22.70
Alberta	9.90	N.A.	9.90
TOTAL	477.18	295.30	772.48

Appendix C.3

Active Rail Line Abandonment Applications and Lines Under Reconsideration during 1993

(Subsections 160(4) and 171(1) of the *NTA*, 1987)

Province/Railway/ Subdivision	Between Points	Track Miles	Status
Nova Scotia			
CN Chester ¹	Summit-Barry's Stillwater Marsh 4.9 - 42.25 incl. 3.5 miles of of other trackage	40.85	Abandoned November 21, 1993
CN Oxford ¹	Oxford Jct.-Pugwash Jct. 1.0 - 16.50 Pugwash Spur 4.6 miles	23.0	Abandoned October 24, 1993
CP Halifax ^{1,3}	52.9 - 56.1 Kentville Spur 4.6 miles Kingsport Spur 2.3 miles	10.1	Abandoned September 22, 1993
	CN Total Miles	63.85	
	CP Total Miles	10.1	
New Brunswick			
CP Edmundston ^{1,3}	20.4 - 28.2	7.8	Application dismissed August 23, 1993
CN Havelock ¹	Petitcodiac-Havelock 0.50 - 12.40	11.90	Abandoned May 13, 1993
CP Fredericton /Gibson ^{1,5}	Fredericton Jct.-Fredericton 1.0 - 22.2 Southampton-South Devon 22.0 - 59.0 Minto Spur 0.9 miles Southampton Spur 9.48 miles	68.58	Abandoned December 4, 1993
CP Mattawamkeag /McAdam /St. Stephen /Fredericton ^{1,3,4,5,6}	0.0 - 5.6 0.17 - 84.4, incl. West Saint John Spur 3.2 miles 0.0 - 33.9, incl. Milltown Spur 4.6 miles 0.0 - 1.0	132.53	Abandonment deferred until January 1, 1995
CP St. Andrews ¹	0.0 - 18.12 Champlain Spur 3.68 miles	21.80	Abandoned May 2, 1993
	CN Total Miles	11.90	
	CP Total Miles	230.71	

Province/Railway/ Subdivision	Between Points	Track Miles	Status
Québec			
CN Chapais ^{2,6}	Franquet-Chapais 72.06 - 169.40	97.34	6.0 miles ordered continued; abandonment of 91.34 miles deferred until May 31, 1994
CN Granby ²	Clough- Marieville 15.57-38.70	23.13	Abandoned January 31, 1994
CN Massena ¹	Huntingdon-St-Isidore 38.9 - 72.5 incl. Valleyfield Subd. 26.1 - 27.2 incl. Beauharnois Spur 5.0 miles	39.7	Abandoned November 7, 1993
CN Montmagny ⁷	Harlaka-St-Romuald 111.35-119.12	7.77	Abandonment decision rescinded
CN Montréal ¹	Harbour Branch Spur 0.4 - 1.3 incl. St. Patrick Spur 0.0 - 0.4	1.3	Abandoned January 9, 1994
CP Sherbrooke /Tring /Moosehead ^{1,3,4,5,6}	0.0 - 68.4 57.7 - 59.1 101.7 - 117.1	85.2	Abandonment deferred until January 1, 1995
CN St-Raymond ¹	Shannon-St-Raymond 16.8 - 36.5	19.7	Abandoned October 24, 1993
CP Trois-Rivières ¹	Berthierville Spur 2.1 miles	2.1	Abandoned September 2, 1993
CP Waltham ¹	Wamo Spur 1.0 mile	1.0	Abandoned January 22, 1993
	CN Total Miles	188.94	
	CP Total Miles	88.3	
Ontario			
CSXT No. 1 ¹	Arner-Ruthven 27.68 - 33.79	6.11	Abandoned May 7, 1993
CP Chalk River ^{1,3,4,5}	0.9 - 95.6	94.7	Ordered abandoned July 1, 1994
CP Chalk River /North Bay ^{1,3,4,5}	106.0 - 115.3 0.0 - 71.2	80.5	Ordered abandoned July 1, 1994
CN Dundas ²	Burford Spur 7.65 miles	7.65	Abandonment application dismissed

Province/Railway/ Subdivision	Between Points	Track Miles	Status
CN Graham ¹	Conmee-Superior Jct. 0.0 - 159.5 incl. Mattabi Mine Spur 13.5 miles incl. 27.3 miles of other trackage	200.3	Application received December 21, 1993
CN Meaford ²	Barrie-Collingwood 1.09 - 31.4 incl. Penetang Spur 2.0 miles incl. Pretty River Spur 0.92 mile	33.23	Notice of Reconsideration issued September 30, 1993
CN Newmarket ^{1,3,4,5}	Dykstra-North Bay 226.8 - 228.9	2.1	Ordered abandoned July 1, 1994
CN Newton ^{2,8}	Stratford-Palmerston 1.17 - 36.62	35.45	Reconsideration process deferred until September 30, 1994
CN Owen Sound ^{2,8}	Palmerston-Harriston 0.0 - 9.43	9.43	Reconsideration process deferred until September 30, 1994
CN Owen Sound ²	Harriston-Owen Sound 9.43 - 71.43 incl. 1.41 miles of the Kincardine Subdivision	63.41	Abandoned October 30, 1993
CN Uxbridge ²	38.88-Stouffville 38.88 - 40.31	1.43	Abandoned June 26, 1993
CP Waterloo ¹	North Jct.-Waterloo 13.0 - 15.8 incl. Ottawa St. Spur 1.0 mile Kent Avenue Spur 0.4 mile	4.2	Abandoned July 31, 1993
	CN Total Miles	353.00	
	CP Total Miles	179.4	
	CSXT Total Miles	6.11	
Saskatchewan			
CP Gravelbourg ¹	Hodgeville-Tyson 53.1 - 57.3	4.2	Abandoned August 21, 1993
CP Kisbey ¹	Stoughton-Griffin 25.1 - 43.6	18.5	Ordered abandoned January 13, 1994
	CP Total Miles	22.7	
Alberta			
CN Athabasca ¹	Legal-Athabasca 32.2 - 93.1	60.9	Abandoned March 12, 1993

Province/Railway/ Subdivision	Between Points	Track Miles	Status
CN Waterways ¹	Lynton-Waterways 276.0 - 285.9 incl. 2.8 miles of other trackage	12.7	Abandoned October 14, 1993
	CN Total Miles	73.6	

Footnotes

- ¹ First consideration of the application
- ² Reconsideration of application
- ³ Subject of public hearing
- ⁴ Appealed to Federal Court
- ⁵ Petition to Governor in Council
- ⁶ Abandonment date varied by Governor in Council
- ⁷ Order and Decision rescinded by Governor in Council
- ⁸ Extension of time to September 30, 1994 to complete Offer filed on October 9, 1992 by the Victoria County Railway Company pursuant to section 174 of the *NTA, 1987* to purchase from CN the Newton Subdivision between Stratford (m. 1.17) and Palmerston (m. 36.62) and the Owen Sound Subdivision between Palmerston (m. 0.0) and Harriston (m. 9.43) in Ontario.

Endnotes

- A** This table provides details of the applications and rail line segments dealt with in 1993 or for which a decision can be expected to be rendered during 1994. Excluded are cases where no application was received, as well as any conveyance applications and cancelled applications.
- B** Under section 171 of the *NTA, 1987*, a line ordered continued must be reconsidered by the Agency within three years.

Appendix C.4

Summary of Orders and Decisions, 1993 Branch Line Abandonment Under the NTA, 1987

Province/Railway/ Subdivision	Between Points	Track Miles	Order No./Date	Decision
Nova Scotia				
CN Chester	Summit-Barry's Stillwater Marsh 4.9 - 42.25	40.85	1993-R-327 93/10/22	Abandoned November 21, 1993
CN Oxford	Oxford Jct.-Pugwash Jct. 1.0 - 16.50 Pugwash Spur 4.6 miles	23.0	1993-R-296 93/09/24	Abandoned October 24, 1993
CP Halifax	52.9 - 56.1 Kentville Spur 4.6 miles Kingsport Spur 2.3 miles	10.1	1993-R-267 93/08/23	Abandoned September 22, 1993
New Brunswick				
CN Havelock	Petitcodiac-Havelock 0.50 - 12.40	11.90	1993-R-105 93/04/13	Abandoned May 13, 1993
CP Edmundston	20.4 - 28.2	7.8	1993-R-268 93/08/23	Application dismissed August 23, 1993
CP Fredericton /Gibson	Fredericton Jct.- Fredericton 1.0 - 22.2 Southampton-South Devon 22.0 - 59.0 Minto Spur 0.9 miles Southampton Spur 9.48 miles	68.58	1993-R-66 93/03/04	Abandoned December 4, 1993
CP Mattawamkeag /McAdam /St. Stephen /Fredericton ¹	0.0 - 5.6 0.17 - 84.4, incl. West Saint John Spur 3.2 miles 0.0 - 33.9, incl. Milltown Spur 4.6 miles 0.0 - 1.0	132.53	1993-R-266 93/08/23	Ordered abandoned August 23, 1994

Province/Railway/ Subdivision	Between Points	Track Miles	Order No./Date	Decision
CP St. Andrews	0.0 - 18.12 Champlain Spur 3.68 miles	21.80	1993-R-30 93/02/01	Abandoned May 2, 1993
Québec				
CN Chapais ²	Franquet-Chapais 72.06 - 169.40	97.34	1993-R-211 93/07/12	6.0 miles ordered continued; 91.34 miles ordered abandoned August 12, 1993
CN Granby	Clough- Marievalle 15.57-38.70	23.13	1993-R-57 93/03/01	Abandoned January 31, 1994
CN Massena	Huntingdon-St-Isidore 38.9 - 72.5 incl. Valleyfield Subd. 26.1 - 27.2 incl. Beauharnois Spur 5.0 miles	39.7	1993-R-283 93/09/07	Abandoned November 7, 1993
CN Montmagny ^{3,4}	Harlaka-St-Romuald 111.35-119.12	7.77	1991-R-170 91/04/03	Ordered abandoned April 3, 1992
			1992-R-364 92/04/03	Abandonmen dated extended to April 3, 1993
CN Montréal	Harbour Branch Spur 0.4 - 1.3 incl. St. Patrick Spur 0.0 - 0.4	1.3	1993-R-389 93/12/10	Ordered Abandoned January 9, 1994
CP Sherbrooke /Tring /Moosehead ¹	0.0 - 68.4 57.7 - 59.1 101.7 - 117.1	85.2	1993-R-269 93/08/23	Ordered abandoned August 23, 1994
CN St-Raymond	Shannon-St-Raymond 16.8 - 36.5	19.7	1993-R-298 93/09/24	Abandoned October 24, 1993
CP Trois-Rivières	Berthierville Spur 2.1 miles	2.1	1993-R-251 93/08/03	Abandoned September 2, 1993
Ontario				
CSXT No. 1	Arner-Ruthven 27.68 - 33.79	6.11	1993-R-100 93/04/07	Abandoned May 7, 1993
CP Chalk River CP Chalk River/ North Bay	0.9 - 95.6 106.0 - 115.3 0.0 - 71.2	175.2	1993-R-355 93/11/19	Ordered abandoned July 1, 1994

Province/Railway/ Subdivision	Between Points	Track Miles	Order No./Date	Decision
CN Dundas	Burford Spur 7.65 miles	7.65	1993-R-206 93/07/08	Abandonment application dismissed
CN Newmarket	Dykstra-North Bay 226.8 - 228.9	2.1	1993-R-356 93/11/19	Ordered abandoned July 1, 1994
CN Owen Sound	Harriston-Owen Sound 9.43 - 71.43 incl. 1.41 miles of the Kincardine Subdivision	63.41	1993-R-303 93/09/30	Abandoned October 30, 1993
CN Uxbridge	38.88-Stouffville 38.88 - 40.31	1.43	1993-R-167 93/05/27	Abandoned June 26, 1993
CP Waterloo	North Jct.-Waterloo 13.0 - 15.8 incl. Ottawa St. Spur 1.0 mile Kent Avenue Spur 0.4 mile	4.2	1993-R-129 93/05/03	Abandoned July 31, 1993
Saskatchewan				
CP Gravelbourg	Hodgeville-Tyson 53.1 - 57.3	4.2	1993-R-234 93/07/21	Abandoned August 21, 1993
CP Kisbey	Stoughton-Griffin 25.1 - 43.6	18.5	1993-R-391 93/12/14	Ordered abandoned January 13, 1994
Alberta				
CN Athabasca	Legal-Athabasca 32.2 - 93.1	60.9	1993-R-46 93/02/11	Abandoned March 12, 1993
CN Waterways	Lynton-Waterways 276.0 - 285.9 incl. 2.8 miles of other trackage	12.7	1993-R-287 93/09/14	Abandoned October 14, 1993

Footnotes:

- ¹ Governor in Council Order 1993-1864 dated September 23, 1993 varied abandonment date to January 1, 1995.
- ² Governor in Council Order 1993-1666 dated August 11, 1993 varied abandonment date of 91.34 miles to May 31, 1994.
- ³ Decision dated October 4, 1991 varied Order No. 1991-R-170 to exclude miles 119.12 to 120.30.
- ⁴ Governor in Council Order 1993-256 dated March 16, 1993 rescinded Orders and Decisions.

Appendix C.5

Summary of Plans for Abandonment Notices and Applications, 1994

To determine the abandonment plans of the various railways under its jurisdiction, the Agency solicited submissions from the following companies:

- Algoma Central Railway
- Burlington Northern Railroad Company
- Canadian National Railway Company
- Canadian Pacific Limited
- Consolidated Rail Corporation
- CSX Transportation Incorporated
- Devco Railway Company
- The Essex Terminal Railway Company
- Nipissing Central Railway
- Norfolk and Western Railway Company
- Québec North Shore and Labrador Railway Company
- Wabush Lake Railway Company and Arnaud Railway Company
- The White Pass and Yukon Corporation Limited

Of the companies canvassed, only CN and CSXT submitted abandonment plans. None of the other companies indicated that they had any branch line abandonment plans for 1994.

Whereas the following summary indicates the order of magnitude of notices and applications and approximate mileages to be submitted, the actual lines proposed to be abandoned are still subject to change contingent upon such factors as business decisions, government decisions and negotiations with customers.

Summary of Planned 1994 Branch Line Abandonment Activities

	CN	CP	CSXT	TOTAL
Notices of Intent	8	0	1	9
Abandonment Applications*	20	4	2	26
Total Mileage	169	272	52	493

* Includes cases where applications will be submitted during 1994 following Notices of Intent filed in 1993.

Appendix C.6

Rail Subsidy Payments Made in Calendar Year 1993

Subsidy Program	\$ (000)*
WGTA	656,722
Branch Lines	25,793
Passenger** (non-VIA)	15,636
ARFAA	95,656
MFRA	10,110

* Includes payments made in respect of prior years

** Quebec North Shore & Labrador RR Company
Algoma Central Railway
Canadian National Railway - Northlander

Legend

WGTA = Western Grain Transportation Act
ARFAA = Atlantic Region Freight Assistance Act
MFRA = Maritime Freight Rates Act

Appendix C.7

Rail Branch Line Payments in Respect of 1993 (by subdivision)

Province/Railway/ Subdivision	Between Points	Track Miles	\$
New Brunswick			
CP			
Nackawic Loop	Fredericton	1.0 to 22.2	
	Minto	0.0 to 0.9	
	Southampton	0.0 to 9.5	
	Gibson	22.0 to 59.0	1,092,290
St. Andrews	Watt-Mile 18.1	0.0 to 18.1	13,378
Québec			
CN			
Chandler	Ste. Adelaide-Gaspé	48.10 to 104.23	515,084
Chapais	Franquet-Chapais	72.06 to 169.40	458,354
Granby	Granby West-Marieville	15.57 to 38.70	25,070
Montmagny	Harlaka-St. Romuald	111.35 to 120.40	110,466
Sorel	Tracy-Sorel	45.50 to 47.16	89,621
Ontario			
CP			
CASO	Hewitt-Fargo	19.50 to 168.40	654,273
Waltham	Wamo Spur	0.00 to 1.0	516
Waterloo	North Jct.-Waterloo	13.0 to 15.8	73,431
CN			
CASO	Hewitt-Fargo	19.47 to 168.37	150,654
Meaford	Barrie-Collingwood	1.09 to 31.40	423,905
Midland	Uthoff-Midland	52.00 to 75.21	809,797
Newton	Stratford-Palmerston	1.17 to 36.62	182,420
Owen Sound	Palmerston-Owen Sound	0.00 to 71.43	286,125
Taschereau	La Sarre-Cochrane	99.00 to 181.42	547,987
Uxbridge	M.P. 38.88-Stouffville	38.88 to 40.31	13,525
Manitoba			
CN			
Oak Point	Moore-Steep Rock	7.80 to 131.00	768,611
Sherridon	Sherrit Jct.-Lynn Lake	0.00 to 184.80	1,230,550
Saskatchewan			
CP			
Assiniboia	Exon-Pangman	0.10 to 36.50	138,996
Gravelbourg	Hodgeville-Tyson	53.10 to 57.30	7,594
Kisbey	Stoughton West-Griffin	25.10 to 43.60	50,439
Outlook	Mile 115.0 to Mile 120.7	115.00 to 120.70	42,630

Province/Railway/ Subdivision	Between Points	Track Miles	\$
Saskatchewan			
CN			
Gravelbourg	Gravelbourg Jct.-Claybank	0.00 to 7.90	3,588
Meadow Lake	Tobey-Meadow Lake	0.00 to 94.17	919,689
Northgate	Northgate-Lampman	0.00 to 39.42	152,407
Alberta			
CP			
Breton	Mile 14.0 to Mile 43.0	14.00 to 43.00	1,145,252
CN			
Athabasca	Legal-Athabasca	32.20 to 93.10	31,690
Meander River	High Level-Hay River	183.02 to 377.00	1,168,286

Appendix D.1

Trucking Bankruptcies Reported

	1987	1988	1989	1990	1991	1992	1993
Nfld	3	3	3	11	14	11	17
P.E.I.	-	-	-	1	1	1	2
N.S.	9	16	17	24	50	37	30
N.B.	5	3	7	21	33	21	21
Québec	32	40	65	142	108	119	91
Ontario	59	77	58	147	191	188	152
Manitoba	24	27	29	44	44	13	22
Sask.	19	27	22	46	32	13	10
Alberta	93	109	92	123	147	145	98
B.C.	78	90	86	95	143	88	56
Yukon	-	2	1	2	-	-	-
N.W.T.	-	-	1	0	-	-	-
Total	322	394	381	656	763	636	499

Appendix E.1

Employment

Year	Transport Sector (000's)					All Other Sectors
	Air	Rail	Truck	Water	All	
1993	56.9	60.0	117.5	24.6	418.9	9,561.3
1992	58.6	62.5	118.1	23.1	421.1	9,531.2
1991	61.7	63.9	120.2	26.2	431.1	9,800.8
1990	68.2	68.6	133.1	27.9	466.3	10,329.6
1989	65.9	73.0	138.9	29.5	457.3	10,244.4
1988	61.2	76.3	130.9	29.1	439.8	9,889.3
1987	57.3	79.1	128.0	28.4	433.5	9,574.6
1986	55.1	88.3	125.0	28.4	437.0	9,189.5
1985	51.7	91.1	128.5	28.9	437.8	8,925.0
1984	49.5	95.5	128.1	30.7	440.1	8,595.9
1983	50.3	96.2	119.4	33.6	437.7	8,376.4

Appendix E.2

Average Weekly Earnings (Current dollars)

Year	Transport Sector					All Sectors
	Air	Rail	Truck	Water	All	
1993	740	886	583	833	668	559
1992	775	844	569	775	656	549
1991	745	821	550	750	642	532
1990	702	770	547	725	610	508
1989	653	726	544	733	598	486
1988	629	695	531	699	579	462
1987	593	631	500	658	548	443
1986	583	628	481	614	533	427
1985	578	588	484	620	520	414
1984	569	575	476	598	507	400
1983	545	538	460	554	485	384

Appendix E.3

Strikes and Lockouts

Number of Cases

Year	Air	Rail	Truck	Water
1993	2	2	4	2
1992	2	1	5	3
1991	2	—	5	5
1990	1	3	6	6
1989	3	4	12	4
1988	4	1	5	5
1987	4	1	3	5
1986	6	1	4	6
1985	10	—	6	1
1984	3	—	5	—
1983	4	2	12	3

Workers Involved

Year	Air	Rail	Truck	Water
1993	446	1,612	245	106
1992	543	258	651	1,305
1991	320	—	3,399	353
1990	24	1,880	572	415
1989	187	444	2,811	2,527
1988	1,016	3,000	214	5,734
1987	8,930	48,660	92	1,441
1986	3,860	102	73	5,026
1985	12,633	—	79	78
1984	125	—	366	—
1983	478	1,565	465	146

Appendix E.4

Regional Distribution of Transportation Employment since 1983

Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Nfld	7,100	6,400	6,400	5,100	4,800	5,300	6,100	6,500	6,000	5,900	6,000
PEI	1,900	1,900	1,900	1,800	1,300	2,000	1,900	2,000	1,900	1,800	1,900
N.S.	13,600	13,900	13,200	13,200	13,700	12,800	13,300	13,500	11,500	11,400	11,400
N.B.	14,200	14,800	15,000	14,800	13,700	12,900	13,500	12,700	11,000	11,700	12,000
Que.	106,600	107,700	101,700	98,700	104,100	105,600	109,600	108,500	101,200	100,500	103,900
Ont.	133,100	134,400	136,600	142,800	139,500	145,200	147,200	158,200	142,800	140,900	134,000
Man.	25,400	25,300	24,300	24,100	23,000	23,500	24,800	24,200	23,700	22,500	15,500
Sask.	12,300	12,600	12,800	13,000	12,100	12,800	12,200	12,300	11,400	11,900	11,200
Alta	48,300	47,900	51,400	48,200	46,100	47,700	49,100	54,700	48,000	47,800	47,700
B.C.	70,600	70,000	69,400	69,800	68,900	66,800	74,200	69,000	69,200	62,500	63,700
Yukon	1,100	1,200	1,300	1,400	1,200	1,300	1,400	1,100	800	800	700
NWT	500	400	400	400	200	400	400	400	500	500	400
Total	434,700	436,500	434,400	433,300	428,600	436,300	453,700	463,100	428,000	418,200	408,400



READER RESPONSE CARD

Name/title _____
Organization _____

1. Which modes/topics covered in the Annual Review are of interest to you?

air	<input type="checkbox"/>	regulatory environment	<input type="checkbox"/>	transport pricing	<input type="checkbox"/>
rail	<input type="checkbox"/>	economy	<input type="checkbox"/>	employment	<input type="checkbox"/>
trucking	<input type="checkbox"/>	industry structure	<input type="checkbox"/>	financial performance	<input type="checkbox"/>
marine	<input type="checkbox"/>	transportation services	<input type="checkbox"/>	competition	<input type="checkbox"/>
intermodal	<input type="checkbox"/>	transportation demand	<input type="checkbox"/>	safety	<input type="checkbox"/>
2. Are there sections of the Annual Review you would like to see enhanced? (Please specify) _____
3. Are there sections of the Annual Review you would like to see reduced? (Please specify) _____
4. Are there other issues/topics of current interest that you would like to see covered in the Annual Review? (Please specify) _____
5. Would you prefer: a single, comprehensive Annual Review ☐, or a smaller Annual Review plus more frequent, shorter reports ☐?
6. Would you prefer: more analysis and less data/statistics ☐, or more data/statistics and less analysis ☐?

Additional comments: _____

For further information, telephone (819) 997-6764 or FAX message to (819) 953-9774.



READER RESPONSE CARD

Name/title _____
Organization _____

1. Which modes/topics covered in the Annual Review are of interest to you?

air	<input type="checkbox"/>	regulatory environment	<input type="checkbox"/>	transport pricing	<input type="checkbox"/>
rail	<input type="checkbox"/>	economy	<input type="checkbox"/>	employment	<input type="checkbox"/>
trucking	<input type="checkbox"/>	industry structure	<input type="checkbox"/>	financial performance	<input type="checkbox"/>
marine	<input type="checkbox"/>	transportation services	<input type="checkbox"/>	competition	<input type="checkbox"/>
intermodal	<input type="checkbox"/>	transportation demand	<input type="checkbox"/>	safety	<input type="checkbox"/>
2. Are there sections of the Annual Review you would like to see enhanced? (Please specify) _____
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6. Would you prefer: more analysis and less data/statistics ☐, or more data/statistics and less analysis ☐?

Additional comments: _____

For further information, telephone (819) 997-6764 or FAX message to (819) 953-9774.



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